

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW MEXICO

CHEVRON MINING,

Plaintiff

vs.

No. 1:13-CV-00328 PJK/JFR

UNITED STATES OF AMERICA,  
UNITED STATES DEPARTMENT OF THE INTERIOR,  
UNITED STATES DEPARTMENT OF AGRICULTURE,

Defendants.

TRANSCRIPT OF PROCEEDINGS

March 14, 2022

Volume 1  
Pages 1 - 208

BEFORE: HONORABLE JUDGE PAUL KELLY  
UNITED STATES 10TH CIRCUIT JUDGE

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1 I N D E X

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1                   THE COURT: Good morning. You may be  
2     seated.

3                   Before we begin, are there any  
4     preliminaries we need to handle?

5                   MR. TODD: Good morning, Your Honor.  
6     Gordon Todd for Chevron.

7                   Your Honor, we have a couple of things to  
8     address. First of all, one of Chevron's expert  
9     witnesses is unavailable to testify this week,  
10    Dr. Robert Haddad, who is a remediation expert. He  
11    lives in Los Angeles, and his elderly mother is  
12    dying. We talked about it. She is not quite in  
13    hospice care yet but had a stroke and congenitive  
14    heart failure.

15                  THE COURT: Had a stroke?

16                  MR. TODD: She had a stroke. And she was  
17    already suffering from heart disease, so this week  
18    he is meeting with doctors trying to attend to her  
19    medical care and deciding what further care is  
20    appropriate or not, so he doesn't want to leave the  
21    Los Angeles area.

22                  So we discussed with the Government, and  
23    the Government's amenable to leaving the record open  
24    to take care of Dr. Haddad's cross-examination at  
25    some point after this week.

1           The Chevron team and Dr. Haddad are  
2   willing to do it remotely if that would work for the  
3   Court. He is available at the end of next week or  
4   the week after.

5           I know Your Honor has a Tenth Circuit  
6   sitting. I think the Government would prefer to do  
7   it in person. I will let them speak for themselves.  
8   But we just need to work out a date if that is okay  
9   with the Court.

10           THE COURT: We will work on it.

11           MR. TODD: Great, Your Honor.

12           The other thing is we have worked out an  
13   agreement, the sides have discussed and if it is  
14   okay with both sides, if it is okay with the Court,  
15   that all witnesses remain in the courtroom during  
16   the hearing. The only fact witness is Mr. Gene  
17   Dewey, who is testifying first. Everyone else is an  
18   expert.

19           Is that acceptable with the Court?

20           THE COURT: There is no reason to invoke  
21   the rule.

22           MR. TODD: Exactly. Thank you,  
23   Your Honor.

24           THE COURT: Now, what about exhibits that  
25   were to be admitted, agreed upon exhibits prior to

1 the commencement of testimony?

2 MR. TODD: Sorry, I think we need some  
3 guidance from the Court on that.

4 All of the direct examinations have been  
5 submitted. I don't know if Your Honor needs  
6 anything further on that, if we need to formally  
7 tender them when a witness takes the stand.

8 And Your Honor previously ruled that all  
9 of the exhibits discussed in direct testimony are  
10 automatically admitted.

11 So we are all, we are assuming those are  
12 in and nothing else is in yet. I think the  
13 Government has something else they want to say on  
14 that front.

15 THE COURT: The Government has some  
16 cross-examination exhibits that they wish to admit?

17 MS. KIMBALL: Yes, Your Honor. We will  
18 have additional exhibits on cross-examination. We  
19 are happy to admit them all at the start, if that is  
20 easier.

21 THE COURT: Okay, can you speak into the  
22 microphone with the glass sealing here that --

23 MS. KIMBALL: Sorry about that. Is that  
24 better?

25 THE COURT: Yes.

1 MS. KIMBALL: The Government does have  
2 exhibits that they will be admitting on  
3 cross-examination. We are happy to tender all of  
4 those at the start or we can -- or would the Court  
5 prefer that we list out where it has already been  
6 admitted or the Government has a list of everything  
7 in the directs.

8 THE COURT: So it is probably better just  
9 to do it as we go.

10 MS. KIMBALL: Okay. And for the direct  
11 exhibits?

12 THE COURT: Yeah.

13 MS. KIMBALL: Okay. And for the direct  
14 exhibits, would the Court prefer that we identify at  
15 this point what all is coming in?

16 THE COURT: You might as well. And I  
17 think just a simple motion would do it.

18 MS. KIMBALL: Okay. I have a motion for  
19 the Government's witnesses -- for the Government's  
20 Exhibits. I don't have Chevron's.

21 MR. TODD: Your Honor, I suspect that both  
22 sides have an identical list of everything that has  
23 been admitted so far. Perhaps we should -- well,  
24 why don't we just move orally, Your Honor? Could we  
25 move the admission of all of the exhibits identified

1 in the prefiled direct testimony?

2 THE COURT: All right. And without  
3 objections, they are admitted.

4 MR. TODD: Thank you, Your Honor.

5 Your Honor, would the Court staff like a  
6 list to work off at this point of what is admitted  
7 or your law clerks or --

8 THE COURT: That would be helpful, I  
9 think.

10 Julie, do we have it?

11 THE DEPUTY CLERK: I have it Your Honor.

12 THE COURT: We already have it.

13 MR. TODD: Thank you.

14 MS. KIMBALL: One other issue, Your Honor,  
15 because Dr. Haddad is testifying late and because  
16 there is, I guess, some question as to whether or  
17 not he ultimately will be able to testify, we would  
18 like to reserve the right to move to strike the  
19 exhibits that were admitted through his direct  
20 testimony.

21 THE COURT: Who is this now? I'm sorry?

22 MS. KIMBALL: Dr. Haddad.

23 THE COURT: The fellow with the stroke,  
24 yeah.

25 MS. KIMBALL: So if he is ultimately not



1     able to testify, we would like to be able to strike  
2     the exhibits that were admitted, sir.

3             THE COURT: All right.

4             MS. KIMBALL: Thank you, Your Honor.

5             THE COURT: All right. You may call your  
6     first witness.

7             MR. HOPSON: Chevron calls Mr. Gene Dewey.  
8             (Whereupon the witness was sworn.)

9             THE DEPUTY CLERK: Please be seated, and  
10    state and spell your name for the record.

11            THE WITNESS: My name is R. Gene Dewey.  
12    R. G-E-N-E. Dewey, D-E-W-E-Y.

13            THE COURT: You may proceed.

14            MR. AUGUSTINI: Good morning, Your Honor.  
15            Michael Augustine for the United States.

16            THE COURT: I think before we get to the  
17    cross-examination, we need to get his testimony  
18    introduced together with whether or not there is any  
19    changes or additions or deletions.

20            MR. HOPSON: I will be brief.

21            Mr. Dewey, did you work for us to prepare  
22    written direct testimony in this case?

23            THE WITNESS: Yes, I did.

24            MR. HOPSON: Is that your testimony under  
25    oath?

1 THE WITNESS: Yes, it is.

2 MR. HOPSON: Your Honor, there are no  
3 additions or revisions.

4 THE COURT: Very good.

5 Direct testimony will be admitted.

6 (Whereupon, the direct testimony of R.  
7 Gene Dewey was prefiled and admitted.)

8 MR. AUGUSTINI: Your Honor, one  
9 administrative note.

10 We have handed up a notebook, it is before  
11 you, that contains hard copies of the exhibits that  
12 we may use during cross-examination, just as a  
13 supplement. It is an electronic trial but sometimes  
14 people like to look at a hard copy, too.

15 So we provided the same notebook to  
16 Mr. Dewey, and otherwise, we'll proceed.

17 THE COURT: You may proceed.

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1 CROSS-EXAMINATION

2 BY MR. AUGUSTINI:

3 Q. Mr. Dewey, your first job in the mining  
4 industry was with Kennecott Copper Corporation; is  
5 that correct?

6 A. Yes, sir.

7 Q. Did you work at a Kennecott Mine in  
8 Arizona between 1962 and 1967?

9 A. Yes, sir.

10 Q. Kennecott operated a number of mines in  
11 the Western United States, correct?

12 A. Correct.

13 Q. Kennecott's Bingham Canyon Utah Mine is  
14 said to be the largest open pit mine in the world;  
15 is that right, or one of the largest?

16 A. I believe it still is, yes, sir.

17 Q. And Kennecott produced molybdenum as a  
18 byproduct of its copper mining, right?

19 A. Yes.

20 Q. Did you leave Kennecott and start working  
21 for Molycorp at the Questa Mine in July, 1967?

22 A. Yes.

23 Q. When you arrived in 1967, Molycorp had  
24 already been operating the open pit mine for about  
25 two years, right?

1           A.       Yes.

2           Q.       And did you report to B.C. Lansing, the  
3       general manager at that time?

4           A.       Yes.

5           Q.       Did your responsibilities include  
6       analyzing the financial aspects of the Questa Mine?

7           A.       Yes.

8           Q.       During your tenure with the company, did  
9       Molycorp pay all the operational costs associated  
10      with the molybdenum mining?

11          A.       Yes.

12          Q.       Did Molycorp receive the many millions of  
13      dollars generated from the sales of molybdenum  
14      produced at the Questa Mine?

15          A.       Yes.

16          Q.       In September of '69, did you become  
17      general superintendent of the Questa Mine?

18          A.       Yes, sir.

19          Q.       And in that position, were you responsible  
20      for all mining activities in Questa?

21          A.       Yes.

22          Q.       Now, in your testimony, you noted that the  
23      Molycorp management team determined when and where  
24      to mine at Questa; is that correct?

25          A.       That is correct.

1           Q.     And controlling the land was critical to  
2     Molycorp's mining operations; is that right?

3           A.     Would you repeat that?

4           Q.     Controlling the land was critical to  
5     Molycorp's mining operations, right?

6           A.     Yes.

7           Q.     Molycorp made sure that the company owned  
8     or controlled all the land at the Questa Mine,  
9     correct?

10          A.     There was certainly land that wasn't under  
11     Molycorp's control but --

12          Q.     Within the Questa Mine?

13          A.     Yes.

14          Q.     What land was that?

15          A.     All of the unpatented mining claims.

16          Q.     Well, with respect to the unpatented  
17     mining claims, Mr. Dewey, didn't Molycorp have  
18     exclusive possession and use of that land, too?

19          A.     Molycorp had unpatented mining claim  
20     control such as was provided under the law of 1872,  
21     yes.

22          Q.     And so that included the right to conduct  
23     mining on the unpatented land, the unpatented land  
24     as well as the land that Molycorp owned in fee?

25          A.     I honestly don't know if any mining

1 occurred on unpatented mining claims. I can't  
2 answer that question at this point.

3 Okay. That is fine. Mr. Dewey, I will  
4 move on.

5 Molycorp's managers ensured there was  
6 sufficient mining and equipment to conduct the  
7 mining that needed to be done at Questa, correct?

8 A. Yes, sir.

9 Q. For example, Molycorp purchased excavators  
10 and a fleet of hauling trucks to haul land waste  
11 from the open pit, right?

12 A. Yes.

13 Q. No mining equipment was bought by the  
14 United States, right?

15 A. Correct.

16 Q. And based on your experience with the  
17 company, Molycorp determined how many employees to  
18 hire and fire on a routine basis; is that right?

19 A. Yes.

20 Q. Molycorp employees conducted all the  
21 day-to-day mining and disposal activities at the  
22 Questa Mine, correct?

23 A. Repeat that, please.

24 Q. Did Molycorp employees conduct all of the  
25 day-to-day mining and disposal activities at the

1      **Questa Mine?**

2            A.      Yes, sir.

3            Q.      Thank you.

4                    And Molycorp's mining plan determined how  
5   many tons of ore would be supplied to the company  
6   mill for processing; is that right?

7            A.      Yes.

8            Q.      So Molycorp's mining plan determined how  
9   many tons of tailings the mill would generate,  
10   correct?

11          A.      Yes.

12          Q.      And similarly, Molycorp's mining plan  
13   determined how much waste rock from the open pit  
14   would be dumped on the surrounding land at the mine,  
15   correct?

16          A.      Correct.

17          Q.      Mr. Dewey, I would like to show passages  
18   from your direct testimony at this point. It is  
19   **Page 5.**

20                   MR. AUGUSTINI: We are using the  
21   electronic court page references instead of the  
22   internal pages, just for clarity in the record.

23          Q.      (By Mr. Augustini) Directing your  
24   attention to the middle of the page, there is a  
25   question and answer there, and you stated, "Also,

1     **waste disposal capacity and planning is a key**  
2     **element of feasibility planning. So it was**  
3     **something I was very attuned to throughout my time**  
4     **at Molycorp."**

5             THE COURT: Excuse me. Where are you  
6     reading from?

7             MR. AUGUSTINI: Your Honor, the middle of  
8     page, ECF Page 5, Page 4 of Mr. Dewey's written  
9     direct testimony.

10            THE COURT: I am on Page 4 here.

11            MR. AUGUSTINI: Yes. Just in order to  
12     pull it up --

13            THE COURT: It is either Page 5 or 4?

14            MR. AUGUSTINI: I'm sorry, Your Honor, I  
15     tried to explain before to avoid the confusion, and  
16     I apologize, but it is Page 4 of his written  
17     testimony. But just for reference purposes, we're  
18     at the top of ECF filing line. It's Page 5, so that  
19     is why --

20            THE COURT: All right, I can't tell  
21     whether you are giving him the right quotes if I  
22     can't see it.

23            MR. AUGUSTINI: Okay. Maybe we could  
24     highlight the passages, if we can on the fly, but  
25     otherwise, I will try to make sure that I'll cite



1 both page numbers. I apologize, Your Honor.

2 THE COURT: I still only have Page 4 here.

3 MR. AUGUSTINI: That is the correct page.

4 We'll try to highlight it for Your Honor, please.

5 THE COURT: Okay.

6 MR. AUGUSTINI: That is what I just read,

7 Your Honor. It is now blown up a little bigger.

8 THE COURT: Okay.

9 MR. AUGUSTINI: I apologize.

10 Q. (By Mr. Augustini) So, Mr. Dewey, so  
11 hopefully that is a little more visible for you,  
12 too. I realize it is hard to pick it out of a blank  
13 page on the screen.

14 A. Thank you.

15 Q. But that is your testimony, sir?

16 Waste disposal planning was a key element  
17 of the job of mine planning at Questa?

18 A. Very definitely.

19 Q. And was Molycorp's engineering department  
20 primarily responsible for selecting the locations  
21 and designing the configurations of the waste dumps?

22 A. Yes, sir.

23 MR. AUGUSTINI: Mr. Hambrick, please show  
24 Exhibit USX015.

25 Q. (By Mr. Augustini) Mr. Dewey, do you

1     **recognize USX015 as a May 1971 memorandum from**  
2     **Mr. McKereghan to Mr. Torgerson?**

3             A.     Yes.

4             MR. AUGUSTINI: I move to admit USX015,  
5     Your Honor.

6             MR. HOPSON: No objection.

7             THE COURT: Without objection, it is  
8     admitted.

9             (Exhibit admitted, USX015.)

10            Q     **(By Mr. Augustini) And here, referencing**  
11     **the sentence just below the first paragraph, "I**  
12     **believe the following dump criteria should be used."**

13                    So do you agree this is an example of the  
14     engineering department establishing the criteria in  
15     which the waste-rock dumps at the Questa Mine would  
16     be designed?

17            A.     Yes.

18            Q.     And the numbers there listed in USX015  
19     would be 600, 9,000, 9,200, those correspond to  
20     elevations at the mine, correct?

21            A.     Correct.

22            Q.     And so the dumps were located at different  
23     elevations relative to the pit, generally, correct?

24            A.     Right.

25            Q.     The natural terrain at the Questa Mine is

1       **very steep, isn't it?**

2           A.       Yes.

3           **Q.       And that made Molycorp's mining a little**  
4       **bit more of a challenge, right?**

5           A.       A little bit more what?

6           **Q.       The topography impacted where Molycorp**  
7       **chose to locate the mill facilities, the truck shop,**  
8       **the mine roads, and other aspects of the mine; is**  
9       **that right?**

10          A.       Yes.

11          **Q.       One consideration was Molycorp wanted to**  
12       **maximize the use of available space for waste-rock**  
13       **dumps near the open pit; is that right?**

14          A.       Yes.

15               MR. AUGUSTINI:   Mr. Hambrick, please show  
16       USX601.

17          **Q.       (By Mr. Augustini)   Mr. Dewey, do you**  
18       **recognize, again, Mr. Torgerson?**

19          A.       Yes, I do.

20          **Q.       And who is he?**

21          A.       He was the chief engineer at the mine at  
22       that time.

23               MR. AUGUSTINI:   Your Honor, I move to  
24       admit USX601.

25               THE COURT:   Any objection?

1 MR. HOPSON: No objection, Your Honor.

2 THE COURT: It will be admitted.

3 (Exhibit admitted, USX601.)

4 Q (By Mr. Augustini) And this memo,  
5 Mr. Dewey, refers to Riverside Dump Mechanics; is  
6 that right, the title?

7 A. Yes.

8 MR. AUGUSTINI: If we could turn to the  
9 next page, Mr. Hambrick. Highlight the Section 2 at  
10 the bottom, please.

11 Q. (By Mr. Augustini) Do you see the  
12 Section 2 titled, "Maximize Lower Dump Life,"  
13 Mr. Dewey?

14 A. Yes.

15 MR. HOPSON: Your Honor, I don't have an  
16 objection. I would like to give a binder with the  
17 complete document to Mr. Dewey so he can see the  
18 document in whole rather than just excerpts that the  
19 Government has provided.

20 THE COURT: You have that document, don't  
21 you?

22 MR. HOPSON: Yes, thank you.

23 MR. AUGUSTINI: It is USX601.

24 I have a few simple questions.

25 May I proceed, Your Honor, or --

1 THE COURT: Let him find it.

2 Did you find 601, Mr. Dewey?

3 THE WITNESS: Yes, I did. I have reviewed  
4 it, sir.

5 THE COURT: You may proceed.

6 Q (By Mr. Augustini) Thank you.

7 I was just going to reference the first  
8 sentence under the maximize dump utilization.

9 It states, "Recent studies into the  
10 mechanics of waste disposal at the Riverside dumps  
11 indicate that the upper terrace dumps must lead the  
12 lower terrace dumps east to west in order to  
13 maximize the utilization of available dump storage,"  
14 and then the memo continues.

15 Is this just another example, Mr. Dewey,  
16 of the engineering department doing dump planning  
17 and design in order to maximize the available space  
18 at the site?

19 A. Once this became the only option, the  
20 Riverside dumps became the only option, a  
21 significant amount of time was then spent trying to  
22 figure out how to get all of this waste on that  
23 hillside. And this ongoing activity, yes, sir.

24 Q. Using the space that was available to it,  
25 it was important for the operation, correct?

1           A.       That is correct.

2           Q.       Okay. By 1974, you were in charge of all  
3       operations at the Questa Mine; is that right?

4           A.       Yes, sir.

5           Q.       And those operations included managing the  
6       waste dumps in the company's offsite tailings  
7       disposal facility, correct?

8           A.       Yes.

9           Q.       By the mid-1970s, Molycorp planned to  
10       transition from an open pit mine to a -- developed a  
11       new underground mine; is that right?

12          A.       Yes.

13          Q.       And in 1976, I believe you received a  
14       promotion to be vice president of the company and  
15       moved to the New York headquarters; is that right?

16          A.       Yes.

17          Q.       And then UNOCAL, Union Oil of California,  
18       acquired Molycorp in 1977, right?

19          A.       Yes.

20          Q.       A few months after the merger, did you and  
21       your team present Molycorp's feasibility analysis to  
22       UNOCAL seeking corporate approval to develop the new  
23       underground mine at Questa?

24          A.       Approximately nine months after its  
25       merger.

1           **Q.       At the time UNOCAL was one of the largest**  
2           **companies in America, correct?**

3           A.       I don't believe that's correct, no, sir.  
4           They were a significantly large company, but not one  
5           of the largest.

6           **Q.       Not part of the Fortune 500, that you**  
7           **recall?**

8           A.       I don't know.

9           **Q.       Okay. At your deposition, I believe you**  
10          **mentioned that the Questa project was the largest**  
11          **investment that UNOCAL had made up to that point in**  
12          **time; is that correct?**

13          A.       That is correct.

14          **Q.       The United States provided no funding for**  
15          **the development and operation of the underground**  
16          **mine, right?**

17          A.       No, that is not correct.

18          **Q.       What funding did the U.S. provide?**

19          A.       They provided half the funding for the  
20          defense mineralization defense contract work.

21          **Q.       Okay. So other than that one loan, which**  
22          **occurred in 1957, correct?**

23          A.       Correct.

24          **Q.       The United States provided no funding**  
25          **whatsoever for the development of the underground**

1     **mine, which happened 20 years later.**

2           A.     I still don't agree with that statement,  
3     sir.

4           **Q.     What else besides the DMEA loan, sir?**

5           A.     The involvement of the USGS in the Defense  
6     Minerals Exploration Act and their certification of  
7     the resource that they said was identified as a  
8     result of that project enabled Molycorp to get  
9     funding from Wall Street to do this operation.

10          **Q.     So my question was direct funding, sir.**

11                   **There was no financing by the**  
12     **United States provided with respect to the**  
13     **underground mine, correct?**

14          A.     Correct.

15          **Q.     Now, between 1985 and 2000, you served as**  
16     **president of Molycorp, right?**

17          A.     Correct.

18          **Q.     And during that period Molycorp owned all**  
19     **the land at the Questa Mine, including the open pit**  
20     **and the underground mine, right?**

21          A.     Yes, sir.

22          **Q.     Molycorp generated and disposed of**  
23     **100 percent of the waste rock in the piles at the**  
24     **Questa Mine, correct?**

25          A.     Yes.



1           Q.       Molycorp also generated and disposed of  
2       100 percent of the tailings at the company's offsite  
3       tailings facility, correct?

4           A.       Yes.

5           Q.       And in addition to the initial dumping of  
6       waste, Molycorp was responsible for managing and  
7       maintaining all the waste piles at the Questa Mine,  
8       correct?

9           A.       Correct.

10          Q.       Molycorp's activities included  
11       consolidating the piles, grading, cutting benches,  
12       into the piles to facilitate ongoing disposal of  
13       waste rock, correct?

14          A.       Correct.

15          Q.       And if the market price warranted, could  
16       Molycorp take what was previously marginal there and  
17       process it to sell from the piles?

18          A.       There was one period in time in which we  
19       attempted to do that unsuccessfully.

20          Q.       I think you testified at your deposition,  
21       sir, that some material was taken from the Sugar  
22       Shack and middle waste-rock piles in the latter  
23       years of the open pit history; is that correct?

24          A.       One period, if I said latter years, that  
25       is correct. A small amount for a month or two to

1     see if that was a possibility. The first time in a  
2     long time the price of molybdenum had increased  
3     dramatically and we were not in a position to  
4     participate in that market.

5           **Q.     In your 33-year career with Molycorp,**  
6     **Mr. Dewey, the company directed, managed and**  
7     **controlled all of the mining disposal operations at**  
8     **the Questa Mine and the offsite tailings area,**  
9     **correct?**

10          A.     Correct.

11          **Q.     Okay. Mr. Dewey, I know you are very**  
12     **familiar with the open pit's operational history.**

13                 MR. AUGUSTINI: At this time,  
14     Mr. Hambrick, I would just -- please show USX594.

15          **Q.     (By Mr. Augustini) Mr. Dewey, are you**  
16     **familiar with a promotional video Molycorp made in**  
17     **the mid-1960s called, "A Story of Molycorp," as**  
18     **reflected in this screenshot?**

19          A.     In the mid-1960s?

20          **Q.     Or at any time, sir.**  
21                 **Have you ever heard of this video before?**

22          A.     I don't know about the mid-1960s.

23                 I believe I'd have to see it, but I think  
24     this was done in conjunction with the dedication of  
25     the new underground mine, which would have been, you

1 know, in 1983 or so.

2 **Q. Okay.**

3 MR. AUGUSTINI: Well, Your Honor --

4 A. I would have to see it.

5 **Q. Sure. I understand, sir. One moment.**

6 MR. AUGUSTINI: Your Honor, we have a  
7 short video clip from this movie that we would like  
8 to request permission to display. It is about two  
9 minutes long. And then Mr. Dewey would have a  
10 better basis to identify what's shown.

11 THE COURT: What is the purpose of the  
12 movie?

13 MR. AUGUSTINI: The purpose is it depicts  
14 the operations occurring in the open pit, including  
15 the excavation of material, the loading of haul  
16 trucks and the dumping of waste down on the waste  
17 piles.

18 THE COURT: Is there a dispute about any  
19 of that?

20 MR. AUGUSTINI: I don't think there is any  
21 dispute that --

22 THE COURT: If there is no dispute, let's  
23 move right on by that.

24 MR. AUGUSTINI: Okay, Your Honor.

25 **Q (By Mr. Augustini) Mr. Dewey, you are**

1      **familiar with the haul trucks that Molycorp used?**

2            A.      Yes, sir.

3            Q.      Some of those had up to a 100-ton payload  
4      **capacity; is that right?**

5            A.      The largest trucks we had were 120 tons.

6            Q.      As part of the open pit mining, was the  
7      **company interested in acquiring the largest possible**  
8      **haul trucks it could?**

9            A.      We were -- we would love to have it but we  
10     didn't have the money to do that.

11          Q.      Still a 100-ton payload is -- I mean,  
12     **these are gigantic machines, right?**

13          A.      Nothing compared to the 400-ton trucks  
14     that exist today, and as it evolved in the period of  
15     time from 120 tons to 200 to 300 to 400. We would  
16     have loved to have had that.

17          Q.      Sure.

18                   But just for the laymen, who is not used  
19     **to seeing these, they are not just pickup trucks,**  
20     **they're hauling waste?**

21          A.      Right.

22          Q.      And when you were working as an executive  
23     **at the Questa Mine, did you frequently observe haul**  
24     **trucks going back and forth from the pit to the**  
25     **waste piles dumping waste?**

1           A.     Yes, sir.

2           Q.     Was that basically a continuing constant  
3     process as relating while mining was occurring?

4           A.     24/7.

5           Q.     And waste hauling, you testified, was one  
6     of the biggest cost drivers of the entire open pit  
7     mining operation, right?

8           A.     Excuse me?

9           Q.     Was waste hauling one of the biggest cost  
10    drivers of the open pit mining?

11          A.     Yes, the biggest.

12          Q.     The biggest.

13                 That is why Molycorp wanted to dump waste  
14    rock as close to the open pit as possible, right?

15          A.     No, sir.

16          Q.     Well, the longer the haul, the more  
17    expensive, right?

18          A.     It depends on the gradient of the haul,  
19    the method of the haul. I really -- truck versus  
20    conveyors for example, so --

21          Q.     Understood.

22                 Molycorp conducted all of the blasting and  
23    excavating, maintained all the mine roads at the  
24    Questa open pit mine; is that right?

25          A.     Yes, sir.

1           Q.     Would you say it was a fairly -- because  
2     of all of that activity, there was a fair amount of  
3     dust that was generated?

4           A.     No. There was a little bit of dust after  
5     a blast, but we always had water trucks on the road.  
6     Several water trucks. That was critical. It was  
7     impossible for those trucks to operate in a dusty  
8     environment.

9           Q.     The terrain is so steep and visibility is  
10    important for the drivers, correct?

11          A.     For the drivers and for the employees.

12          Q.     Right.

13                 MR. AUGUSTINI: Mr. Hambrick, please  
14     display USX584.

15          Q.     (By Mr. Augustini) Mr. Dewey, I will  
16     represent to you that this is a top and bottom  
17     before and after depiction of the Questa Mine.

18                 If you notice, the date below the top  
19     photograph, October 7, 1962, the date below the  
20     bottom photograph, July 7, 2016.

21                 Do you recognize that the Questa Mine is  
22     depicted in those photos?

23          A.     Yes, sir.

24          Q.     And the top photo from 1962 was from  
25     before Molycorp's open pit mining, correct?

1           A.       Correct.

2           **Q.       To your knowledge, there were no visible**  
3 **waste piles of any significance on the surface at**  
4 **the Questa Mine in 1962?**

5           A.       That is correct.

6           **Q.       Nothing like what we see in 2016, correct?**

7           A.       Yes, that is correct.

8           **Q.       And in the 1962 photo, are you aware that**  
9 **the site was generally forested with trees?**

10          A.       Far from it.

11               The site, it included several hydrothermal  
12 scars that were a constant source of pollution to  
13 the Red River after every rainstorm.

14               I would not call it pristine. The whole  
15 river would trench, all the way from just below Red  
16 River to below the mine site. Contains at least  
17 half a dozen hydrothermal scars.

18               Pristine is not a word I would use, sir.

19          **Q.       I didn't say pristine. I asked if there**  
20 **were trees.**

21               **There were trees in 1962 at the site,**  
22 **correct?**

23          A.       It was what?

24          **Q.       There were trees, that's all.**

25          A.       Oh, trees. Not many at the mine site.

1           Again, if you look at a blowup of that  
2 sulphur gulch, it was completely denoted from the  
3 hydrothermal scars.

4           Obviously, there were trees where the dump  
5 site is, yes, but where the open pit mine took place  
6 on the east side, that was -- there were no trees of  
7 any consequence.

8           **Q.       Mr. Dewey, I have circled the area in the**  
9 **1962 photo. I agree there are bare spots where the**  
10 **hydrothermal scars are located.**

11           **Did I circle the one that you were**  
12 **referring to?**

13           A.       Yes, sir.

14           **Q.       Okay. But otherwise, there were trees at**  
15 **the site but there weren't, as of 2016, the white**  
16 **area that we see in the bottom photo, that is all**  
17 **waste rock, correct?**

18           A.       That is correct.

19           MR. AUGUSTINI: Mr. Hambrick, could you  
20 please display US Demonstrative Exhibit 2.

21           **Q.       (By Mr. Augustini) Mr. Dewey, when you**  
22 **have a chance, you agree that this photograph**  
23 **depicts the general appearance of the Questa Mine**  
24 **open pit mining, sir?**

25           A.       Yes, sir.



1           Q.     Okay. Some of the lettering is a little  
2 bit small to read, perhaps, on the screen, but you  
3 are familiar with the layout.

4                   Do you see in green down on the south  
5 there is a label for the Red River and Highway 38?

6           A.     Yes.

7           Q.     That is where those were located, correct?

8           A.     Yes.

9           Q.     And in the foreground, there is a blue  
10 label that sits on top of the mill area.

11                   Is that the correct location?

12          A.     Yes, sir.

13          Q.     Thank you.

14                   And the elevation, there in the mill area,  
15 is a little bit lower than what you would get if you  
16 head up to the top of the open pit rim, correct?

17          A.     The elevation at the mill area is 7900,  
18 elevation to the very top of the pit is 10,000.

19          Q.     And if we look down the Red River trench,  
20 the canyon, and we keep going all the way in the  
21 distance, are those the Guadalupe Mountains that we  
22 can see at the top of that photograph?

23                   THE COURT: If you would stay a little  
24 closer to the microphone. Thank you.

25          Q     (By Mr. Augustini) Mr. Dewey, do you

1 recognize the Guadalupe Mountains at the top of the  
2 photograph?

3 A. Yes, yes, I do.

4 Q. And the company's offsite tailings  
5 facility was located just at the base of those  
6 mountains. You may be able to make it out even, the  
7 white areas.

8 Does that correspond to the company's  
9 tailing facility?

10 A. Yes, it does, sir.

11 Q. And is the approximate pit rim identified  
12 accurately with an orange circle on this  
13 demonstrative?

14 Is the pit rim represented?

15 A. Yes, yes, sir.

16 Q. Okay. Thank you.

17 And are the various waste piles that were  
18 located during the open pit mining also correctly  
19 labeled with the blue lettering surrounding the pit?

20 A. Yes, sir.

21 Excuse me. May I point out something to  
22 go back to a question that you had a couple of times  
23 ago?

24 You have a better view of what this pit  
25 looked like before we started in the top part of

1     that hydrothermal scar.

2           **Q.     Okay. Your counsel can follow up, if he'd**  
3     **like.**

4           A.     Very good.

5           **Q.     Thank you.**

6                   **And the so-called roadside piles, do you**  
7     **see those depicted on the demonstrative?**

8                   THE COURT: What did you call them?  
9     Roadside?

10                  MR. AUGUSTINI: Yes, sir, they are called  
11     the roadside piles.

12           A.     I have never heard them called roadside  
13     piles, but the piles that are adjacent to the  
14     highway you are referring to.

15           **Q.     (By Mr. Augustini) Sure.**

16                   **We are talking about Sulphur Gulch,**  
17     **Mid-Low and Sugar Shack?**

18           A.     Yes, yeah.

19           **Q.     Now, are you aware that those three piles**  
20     **in particular above the state highway are roughly a**  
21     **thousand feet tall?**

22           A.     Yes.

23           **Q.     And what is the green forested area on the**  
24     **south side of the Red River?**

25           A.     What is it?

1           Q.     Is that part of the Carson National  
2     Forest?

3           A.     Yes.

4           Q.     When you came to Questa in the late 1960s,  
5     the Red River already was a popular spot for trout  
6     fishing, right?

7           A.     Yes.

8           Q.     The state's Fish Hatchery is only about a  
9     mile downstream from the tailings impoundments,  
10    right?

11          A.     Right, right.

12          Q.     And the area around Questa in the late  
13    '60s, was there a prime destination for skiing and  
14    various outdoor recreation, right?

15          A.     That is correct.

16          Q.     And when Molycorp decided to develop an  
17    open pit mine, it was aware of its surroundings and  
18    the environment, right?

19          A.     Yeah, that is correct. Molycorp had been  
20    there since 1920.

21          Q.     Right.

22                   Now, Mr. Dewey, I would like to turn to  
23    some questions about Kennecott.

24                   When you left Kennecott in 1967, were you  
25    aware that Kennecott and Molycorp had a longstanding

1     **business relationship?**

2             A.     No.

3             **Q.     Did you find that out after you joined**  
4     **Molycorp?**

5             A.     Yes.

6                     MR. AUGUSTINI: Mr. Hambrick, please  
7     display CX519. Sorry, USX519.

8             **Q.     (By Mr. Augustini) Mr. Dewey, Molycorp is**  
9     **a publicly-traded corporation, right?**

10            A.     Yes, sir.

11            **Q.     And Molycorp prepares reports, annual**  
12     **reports to shareholders, right?**

13            A.     Yes, sir.

14            **Q.     What we have displayed in USX519 is the**  
15     **1955 annual report.**

16                     MR. AUGUSTINI: If we could turn to  
17     Page 3, Mr. Hambrick.

18                     And the first full paragraph, please blow  
19     up.

20            **Q.     (By Mr. Augustini) Do you see the**  
21     **reference there to a stock purchase by Kennecott,**  
22     **Mr. Dewey?**

23            A.     Yes, sir.

24            **Q.     So Molycorp sold Kennecott 50,000 shares**  
25     **of stock in exchange for about 2.8 million in 1955,**

1     **right?**

2           A.     Yes.

3           **Q.     And that money received in 1955 could be**  
4     **used to conduct exploration for newer bodies in**  
5     **Questa, correct?**

6           A.     It was used for general corporate expense,  
7     including some exploration, I'm sure.

8           **Q.     So it was up to the company how to use the**  
9     **funds once the transaction was completed, correct?**

10          A.     Yes, sir.

11          **Q.     And that was two years before the small**  
12     **DMEA loan that you mentioned earlier in your**  
13     **testimony.**

14                   **Two years prior to the DMEA loan in 1957?**

15          A.     Yes, yes, sir.

16          **Q.     And just briefly turning to the Page 4,**  
17     **you probably are familiar with this, Molycorp and**  
18     **Kennecott also had a common interest to explore and**  
19     **develop a rare earth mine in Oka, Québec?**

20          A.     Not a rare earth mine, sir. It was a  
21     Columbian mine.

22          **Q.     Okay. Nevertheless, there was a**  
23     **partnership with Kennecott to develop and explore at**  
24     **the mine in Canada, correct?**

25          A.     It was at the stage of exploration, yes,

1     sir.

2           **Q.     And joint venturers to develop mines are**  
3     **fairly common in the mining industry; isn't that**  
4     **right?**

5           A.     Yes, that occurs.

6           **Q.     And is there a reason because mines are so**  
7     **capital intensive to develop a mine, it costs a lot**  
8     **of money so partners -- partnerships are born?**

9           A.     Generally, the reason is one company or  
10    the other has the right to explore that and they are  
11    willing to bring another company in that might have  
12    some expertise in that particular -- in this case,  
13    you know, I learned a lot about that after I became  
14    vice president, but in this case, the Boca, Molycorp  
15    had been involved in Columbia, from Brazil, Molycorp  
16    had been involved in producing Columbian products  
17    and Kennecott had no experience with Columbian.

18                   And so it was Kennecott's advantage to try  
19    to entice Molycorp to get involved in this project  
20    in order to determine whether it might be  
21    competitive of what was going on in other parts of  
22    the world.

23           **Q.     Sure.**

24                   **And Kennecott provided capital to Molycorp**  
25    **for that in connection with the partnership, right?**

1           A.       That's correct.

2                   MR. AUGUSTINI:   Mr. Hambrick, please  
3   display CX119.

4           Q.       **(By Mr. Augustini) Mr. Dewey, do you**  
5   **recognize the Molycorp Molybdenum Corporation of**  
6   **America header and see the date, September 26, 1961?**

7           A.       Yes, sir.

8           Q.       **And the location is New York. That is the**  
9   **Molycorp headquarters, correct?**

10          A.       Yes.

11                  MR. AUGUSTINI:   Your Honor, I move to  
12   admit CX119.

13                  MR. HOPSON:   No objection.

14                  THE COURT:   Admitted.

15                  (Exhibit admitted, CX119.)

16          Q       **(By Mr. Augustini) If we could just scroll**  
17   **briefly to the end to see the signature.**

18                  Do you see at the bottom, this memo is  
19   **signed by William Kuntz?**

20          A.       Yes, sir.

21          Q.       **What position did he hold at Molycorp at**  
22   **the time? Was he president?**

23          A.       He was certainly president by the time I  
24   got there. I am not sure when he, the exact date he  
25   became president. It could very well have been.



1           **Q.       So a senior executive, nonetheless, in the**  
2   **'60s?**

3           A.       Yes. He was treasurer and assistant  
4   secretary prior to being appointed president, so,  
5   yes.

6           **Q.       And the date, 1961, this is after the DMEA**  
7   **exploration, correct?**

8           A.       Yes.

9           **Q.       And Molycorp, at this time, had not**  
10   **decided on a method of mining yet, right?**

11          A.       No, I don't agree with that.

12          **Q.       Okay. Well, let's look at the -- I'm**  
13   **sorry.**

14          A.       Because at this point in time, 1961, the  
15   fact that they were no longer going to be able to  
16   use this 50-ton-a-day run by mules and a few 50  
17   employees, they had now encountered this significant  
18   large low-grade deposit, that was going to be  
19   something quite different.

20          **Q.       Yes.**

21                **But low-grade deposits can be mined either**  
22   **through underground mining methods or open pit**  
23   **mining methods, correct?**

24          A.       Absolutely not. Low grade -- low grade --  
25   the low grade that we mined at Questa, there is no

1 mine in the world that could successfully pull that  
2 off from underground and be economic.

3 Q. Yes.

4 But that has to do with how close they are  
5 to the surface as opposed to the grade of the ore,  
6 right?

7 A. Molycorp had been mining 5 percent rock, 3  
8 to 5 percent. We are talking rock here that was  
9 three-tenths of 1 percent, so anyway, the decision  
10 to do an open pit, in my mind, was made even as  
11 early as 1960 when the definitive drilling was  
12 initiated.

13 Q. Okay. We will definitely get into this in  
14 more detail, but since you brought it up, what was  
15 the ore grade in the new underground mine?

16 A. Well, approximately -- I think the average  
17 grade was pulled out with something around 0.297.

18 Q. That is low grade, isn't it?

19 A. Not as low as 0.18. And it happened to be  
20 3,000 feet below the surface versus the open pit is  
21 on the surface.

22 Q. Okay. So I just want to understand, the  
23 underground mine was nowhere near 5 percent that  
24 they had been doing in the 1920s and '30s, right?

25 It is significantly lower than -- did you

1 not refer to it as low-grade ore when you were  
2 mining?

3 A. In the 1930s?

4 Q. In the 1930s, you mentioned the grade of,  
5 or that they were extracting from these veins was  
6 5 percent?

7 A. Right.

8 Q. What was the grade of the ore that you  
9 extracted from the underground mine?

10 A. Roughly three-tenths of 1 percent.

11 Q. Three-tenths of 1 percent. .03.

12 Okay. Turning back to CX119, the first  
13 paragraph mentions Al Grazulin.

14 You know, him, correct?

15 A. Yes.

16 Q. What was his role at Molycorp?

17 A. He had been assistant manager and then  
18 there was a period of time when he served as  
19 manager.

20 And when I arrived, he was in charge of  
21 our Government relations.

22 Q. Okay.

23 A. He was a staff person working on --  
24 basically he spent time in Santa Fe when the Santa  
25 Fe legislature was in session.

1 Q. Okay. That is a fair description.

2 Do you see that there is -- Mr. Kuntz's  
3 memo mentions that Al Greslin was in the process of  
4 locating 570 additional mining claims around Questa?

5 A. Yes, sir.

6 Q. And there is a reference there that  
7 Mr. Kuntz is pleased that Molycorp has beaten Climax  
8 to the best prospects for mineralization in Questa,  
9 right?

10 A. Yes.

11 Q. And Climax was, at the time and throughout  
12 the history of the mining in Questa, the largest  
13 producer of molybdenum in the world by far, right?

14 A. Yes.

15 Q. So Molycorp knew that Climax, as a  
16 dominant player in the molybdenum mining market was  
17 looking for opportunities to exploit molybdenum  
18 deposits in Questa as well, correct?

19 A. Correct.

20 Q. And if Molycorp did not maintain its  
21 mining claims correctly, in accordance with the law,  
22 Climax was active in the area and looking to take  
23 advantage of opportunity, correct?

24 A. Correct.

25 Q. Now, with respect to Kennecott, Mr. Kuntz

1     **writes, in the middle --**

2                   MR. AUGUSTINI:  If we could pull out,  
3     Mr. Hambrick, the lower half of the memo.

4           **Q.        (By Mr. Augustini) -- refers to Kennecott**  
5     **exploration.**

6                   **Do you see that, Mr. Dewey?**

7           A.       Yes, sir.

8           **Q.        Were you aware that Kennecott conducted a**  
9     **field examination of the Questa Mine --**

10          A.       I am.

11          **Q.        -- in summer of 1961?**

12          A.       Yes.

13          **Q.        And Kennecott assisted Molycorp in**  
14     **evaluating the potential for the future mine that**  
15     **was under consideration at that time, correct?**

16          A.       No.  They -- Kennecott was working on  
17     their own behalf.  I don't believe they were  
18     assisting Molycorp.  They were deciding whether it  
19     was something they wanted to pursue or not.

20          **Q.        Well, in any event, Molycorp invited them**  
21     **or allowed them to come onto the property and look**  
22     **at all the data and evaluate what the situation was?**

23          A.       At this point, as you pointed out, they  
24     were shareholders, significant shareholders of that.

25          **Q.        Okay.**

1                   MR. AUGUSTINI: Mr. Hambrick, please  
2     display CX118.

3           **Q.        (By Mr. Augustini) The title is a little**  
4     **bit faded, Mr. Dewey, but do you see that is the,**  
5     **"Final Report at Questa Mine Examination, Taos**  
6     **County, New Mexico"?**

7           A.       Yes.

8           **Q.        Do you recognize this report?**

9           A.       Yes, sir.

10          **Q.        This was prepared by Bear Creek Mining,**  
11     **correct?**

12          A.       Yes, sir.

13          **Q.        And that was a division of Kennecott,**  
14     **right?**

15          A.       Yes.

16                   MR. AUGUSTINI: If we could turn to  
17     Page 11, Mr. Hambrick, please.

18                   I don't think that is the right page.

19          **Q.        (By Mr. Augustini) But do you recall that**  
20     **Kennecott provided Molycorp with a proposed**  
21     **financial analysis for a block caving mine in this**  
22     **report?**

23          A.       I don't re- -- I think Kennecott, in this  
24     report, looked at the possibility of block caving  
25     and open pit.

1           **Q.       So that was something -- a block caving is**  
2           **an underground mine, correct?**

3           A.       That is correct.

4           **Q.       So that was something still in play, at**  
5           **least in terms of Kennecott's report, as of 1961,**  
6           **correct?**

7           A.       That is correct.

8                   But, sir, this other resource, as you  
9           pointed out, we went underground to mine  
10          three-tenths ore, that was known at the time and it  
11          was assumed that at some point in time the mine  
12          would go underground because everybody was plunging  
13          underground.

14                   So they looked at -- they looked at the  
15          possibility of doing that through block caving. I  
16          believe Kennecott was one of the first block caving  
17          mines. In fact, the mine I worked at in Arizona  
18          prior to 19 -- I don't know when, the 1940s or  
19          somewhere, was a block caving mine.

20                   So this was a concept they clearly  
21          understood, yes.

22           **Q.       And just not to minimize the levels of**  
23           **analysis but a mining company would want to crunch**  
24           **the numbers for either possibility to understand**  
25           **which is the best option to undertake first,**

1       **correct?**

2           A.       Yeah, but not necessarily undertake first.

3                   In this case, everybody was on -- sitting  
4       on the surface. This underground portion is several  
5       thousand feet deeper and away from that surface  
6       expression.

7           **Q.       Sure.**

8                   **My question was just, you would want to**  
9       **make sure you understand which ore body was going to**  
10      **be most advantageous to exploit before deciding**  
11      **which direction to go, correct?**

12                   **You have to run the numbers to know that.**

13           A.       Not -- the plan that was developed was to  
14      exploit first what was laying on the surface to try  
15      to generate some of the revenue they might be able  
16      to use to develop these material that was several  
17      thousand feet under the mountain.

18                   So the timing of when this large open pit  
19      possibility exist -- was necessary to start first  
20      because that was the easiest and quickest thing to  
21      get into operation.

22                   An underground operation, you are talking  
23      five to seven, seven years at that point in time, so  
24      they are talking 40 or 50 years.

25                   But the -- so to answer your question,



1     yes, they looked at the underground portion of that  
2     ore deposit and they looked at the open pit portion.

3           Q.     Okay.

4                   MR. AUGUSTINI:  If we could turn back to  
5     CX119, Mr. Hambrick.

6           Q.     (By Mr. Augustini) Down on the very last  
7     line and onto the second page, Mr. Kuntz states, "I  
8     got the impression that Carmen feels that a deal  
9     with Kennecott or a comparable large money company  
10    would accelerate our quest for exploration because  
11    of the professional and specialized training of  
12    their personnel."

13                   Does that make sense to you, that the  
14    company would be thinking about whether a  
15    partnership or some involvement by Kennecott in the  
16    mine might make sense in '61?

17           A.     This individual felt that way, yes, sir.

18           Q.     Turning down to the last sentence of the  
19    memo.

20                   "I advised Carmen and Greslin that any  
21    expenditures necessary to the exploration program  
22    should be made.  I tried to impress upon them that  
23    we are intent on making a mine out of Questa and we  
24    should do it as expeditiously as possible."

25                   Is that your understanding of Molycorp's

1     **view as of 1961 to get moving and develop a mine as**  
2     **quickly as possible?**

3           A.     Yes. Molycorp couldn't exist at that  
4     point in time without this mine, and that is why I  
5     said earlier, I believe that Mr. Kuntz and company  
6     had made a decision in 1960s, shortly after the ore  
7     deposit was discovered.

8           **Q.     The company made the decision to proceed**  
9     **with the open pit, correct?**

10          A.     Correct.

11                 MR. AUGUSTINI: Mr. Hambrick, please  
12     display USX191.

13          **Q.     (By Mr. Augustini) Mr. Dewey, do you see**  
14     **the title of this article is, "Long-Haul Drilling"?**

15          A.     Yes, sir.

16          **Q.     And the name to the right, Jack F.B.**  
17     **Dolman?**

18          A.     Yes.

19          **Q.     Molycorp, correct?**

20          A.     Yes.

21          **Q.     Was he the chief geologist at Questa?**

22          A.     At that time, right, yes, sir.

23          **Q.     And if we look down at the bottom -- this**  
24     **is a poor copy, so maybe you won't be able to see**  
25     **the date -- there is a Mining Engineering.**

1                   Is that a publication you are familiar  
2   with?

3           A.     May of '65?

4           Q.     Correct.

5                   If we expand the lower right-hand corner,  
6   at the time.

7                   Mr. Dolman states that, "The company had  
8   allotted about a year to investigate the ore  
9   possibilities at the Questa Mine, which at the  
10   outset was considered only as an underground  
11   operation."

12                  Do you see that sentence?

13          A.     I see that.

14          Q.     And then a little bit further down,  
15   Mr. Dolman writes, "About halfway through the  
16   project, the possibilities of an open pit ore  
17   deposit became apparent."

18                  Do you see that, Mr. Dewey?

19          A.     Yes.

20          Q.     And then Mr. Dolman states that, "A large  
21   amount of drilling had to be done in a short period  
22   to prove or disprove a feasible open pit deposit."

23                  Right?

24          A.     Yes.

25                  MR. AUGUSTINI: Move to admit USX191,

1 Your Honor.

2 THE COURT: Any objections?

3 MR. HOPSON: No objection.

4 THE COURT: Without objection, 191 is  
5 admitted.

6 (Exhibit admitted, USX191.)

7 MR. AUGUSTINI: Mr. Hambrick, please  
8 display CX130.

9 Q. (By Mr. Augustini) Mr. Dewey, this is,  
10 again, a Molycorp letterhead. The date is April 20,  
11 1964, correct?

12 A. Correct.

13 Q. If you look at the first line or the  
14 subject is, "Questa Financing Chemical Bank New York  
15 Trust Company," correct?

16 A. Yes, sir.

17 Q. Are you familiar with that bank?

18 A. Yes.

19 Q. That was one of the lenders of the  
20 company?

21 A. Yes, sir.

22 Q. And the first sentence states, "Bob Kuntz,  
23 Ken Walker, Bob Davis and William Kuntz met with the  
24 people from Chemical Bank."

25 Correct?

1           A.       Yes.

2           Q.       And just briefly, there is discussion of  
3       the terms of the loans that Molycorp was seeking  
4       from the banks, correct?

5           A.       Right.

6           Q.       Now, ultimately, Molycorp did obtain  
7       financing in the amount of 20 million from Bankers  
8       Trust and Malin Bank; is that right?

9           A.       That is correct.

10          Q.       And Chemical Bank provided Molycorp with  
11       additional financing in 1964 through a  
12       12.4 million-dollar debenture agreement; is that  
13       right?

14          A.       You are correct, yes.

15          Q.       Do you agree those bank loans were  
16       critically important to the company to develop the  
17       pit?

18          A.       Yes.

19          Q.       In fact, Molycorp obtained private  
20       financing to fund the development and pit mining  
21       operation, correct?

22          A.       Correct.

23          Q.       I believe you stated in your written  
24       testimony the development costs alone were about  
25       \$50 million.

1                   **Is that approximate?**

2           A.       That is correct.

3           **Q.       And in 1965, that would qualify as a very**  
4           **large investment for Molycorp, right?**

5           A.       Yes.

6           **Q.       And it is a big investment for the banks,**  
7           **too. They are loaning the money for the pit, too,**  
8           **correct?**

9           A.       Correct.

10          **Q.       By contrast, the United States did not**  
11          **provide Molycorp with any capital for the open pit**  
12          **development or operation, correct?**

13          A.       That is correct.

14          **Q.       The United States didn't purchase company**  
15          **stock like Kennecott did, right?**

16          A.       That is correct.

17          **Q.       Nor did Molycorp and the United States**  
18          **enter into any partnership agreements or share**  
19          **profits or losses with respect to the mine**  
20          **operations at Questa, correct?**

21          A.       I believe the DME contract required  
22          Molycorp to repay the loan from any operation that  
23          was a result of the exploration program, and which,  
24          in fact, was paid off within a matter of a couple of  
25          years on the open pit mining operation.

1           **Q.       Sure.**

2                   **Other than paying back the money it**  
3   **borrowed to DMEA, there is no sharing of profits or**  
4   **losses involved, right, with the United States?**

5           A.       That is not correct, sir.

6           **Q.       Well, you paid back the bank loans,**  
7   **correct?**

8           A.       We paid back the bank loans but we paid  
9   millions of dollars in taxes over the years, you  
10 know.

11          **Q.       Because you think taxes are --**

12          A.       We had no profits, but they certainly  
13 shared in the cost of -- associated with the  
14 Government revenues; i.e., state taxes, federal  
15 taxes, so on.

16          **Q.       Okay. Well, taxes are just -- everyone**  
17 **pays taxes, right?**

18          A.       Everyone pays taxes, but they were the  
19 only beneficiaries of that operation, to the best of  
20 my knowledge.

21          **Q.       You view taxes as some form of a joint**  
22 **venture or partnership, is that your testimony?**

23                   MR. HOPSON: Objection, argumentative.

24                   THE COURT: Sustained.

25                   MR. AUGUSTINI: Mr. Hambrick, let's

1 display USX3, please.

2 Q. (By Mr. Augustini) Mr. Dewey, are you  
3 familiar with an S1 Registration Statement Molycorp  
4 filed in October, 1964?

5 A. Yes, sir.

6 Q. Turning to Page 12 or maybe you are  
7 generally familiar, were you aware that Kennecott  
8 supplied almost all the ore that Molycorp processed  
9 in its roster?

10 A. That was Molycorp's primary business, yes.

11 Q. Right. The road it wasn't mining that was  
12 the primary business, it was the roasting of  
13 molybdenum ore that other companies, such as  
14 Kennecott, supplied, correct?

15 A. That supplemented with the underground  
16 mining, that is correct.

17 Q. Okay.

18 MR. AUGUSTINI: Mr. Hambrick, please turn  
19 to USX559.

20 Q. (By Mr. Augustini) Are you familiar,  
21 Mr. Dewey, with the UNOCAL Form S8 Securities  
22 Registration payment from 1977?

23 A. Yes, I have seen this, yes, sir.

24 Q. And you mentioned earlier UNOCAL acquired  
25 Molycorp in the summer of 1977?



1           A.       Yes.

2           **Q.       By that time Molycorp was well into**  
3 **planning what to do after the open pit mine,**  
4 **correct?**

5           A.       Correct.

6           **Q.       Molycorp wanted to invest between 200 to**  
7 **300 million to develop a new underground mine at**  
8 **Questa, right?**

9                   **That was on the table?**

10          A.       I wouldn't say Molycorp wanted to invest  
11 that. There was a joint venture with Kennecott to  
12 define the underground resource. And if those  
13 numbers -- if the mining operation were that large,  
14 then that was the numbers.

15                 See otherwise, Molycorp's plan, we had a  
16 parallel plan to do something on our own without a  
17 joint venture with Kennecott. And so I never  
18 envisioned the same plan that Kennecott had.

19          **Q.       Okay. So just to unpack that a little**  
20 **bit, in connection with the thinking about or**  
21 **planning for the next phase of mining at Questa,**  
22 **Kennecott came back into the picture again and**  
23 **actually did enter a partnership agreement with**  
24 **Molycorp, correct?**

25          A.       Correct. Well, an agreement that could

1     lead to a partnership, yes, sir.

2           **Q.     Okay. Did Kennecott contribute about**  
3     **\$6 million for drilling and exploration related to**  
4     **the Questa Mine?**

5           A.     Yes.

6           **Q.     And in 1975, Molycorp owned virtually all**  
7     **the land at the Questa Mine in fee simple, correct?**

8           A.     Correct.

9           **Q.     And do you recall that if Phase 2 of the**  
10    **partnership with Kennecott was reached, that**  
11    **Kennecott would essentially acquire the mine lands?**

12          A.     They would acquire 60 percent, if I  
13    remember the number.

14          **Q.     Okay.**

15                 MR. AUGUSTINI: Mr. Hambrick, please show  
16    USX11.

17          **Q.     (By Mr. Augustini) Mr. Dewey, do you**  
18    **remember this geological report, Questa project 1975**  
19    **to '77?**

20          A.     Yes, I do.

21          **Q.     Yes?**

22          A.     Yes, sir.

23          **Q.     And this was prepared by Kennecott,**  
24    **correct?**

25          A.     Correct.

1           Q.     Did you receive it as a vice president of  
2     Molycorp?

3                     I'm sorry, sir, we are talking too  
4     quickly.

5                     Did you receive a copy of this report in  
6     your capacity as vice president?

7           A.     Yes, I did.

8           Q.     As it turned out, UNOCAL acquired Molycorp  
9     in July '77 and --

10          A.     August of '77.

11          Q.     August, excuse me.

12                     And the underground mine became a UNOCAL  
13     project at that point, correct?

14          A.     Not at that point, no, sir.

15          Q.     Rather than proceeding with Kennecott  
16     under the partnership, as it turned out the  
17     underground mine was developed under UNOCAL,  
18     correct?

19          A.     Correct.

20          Q.     And UNOCAL bought out Kennecott's  
21     partnership interest in the Questa Mine for  
22     \$13 million.

23                     Do you recall that?

24          A.     Yes, I do.

25                     MR. AUGUSTINI: Mr. Hambrick, please

1 display USX486.

2 Q. (By Mr. Augustini) Mr. Dewey, I know you  
3 might not recall this specific letter at the moment,  
4 but do you see your name on the letterhead at the  
5 top of this exhibit?

6 A. Yes.

7 Q. And the date is February 1979?

8 A. Yes, sir.

9 MR. AUGUSTINI: Your Honor, I move to  
10 admit USX486.

11 THE COURT: Without objections, 486 is  
12 admitted.

13 (Exhibit admitted, USX486.)

14 Q (By Mr. Augustini) Is this a letter, sir,  
15 that you sent to your counterpart at Kennecott in  
16 1979?

17 A. He was not a counterpart, he was the  
18 individual, the head of the exploration group at  
19 Bear Creek Mining.

20 Q. And that would be Mr. Van Voorhis?

21 A. Van Voorhis.

22 Q. And do you recall your letter generally  
23 commends the Kennecott geologists who came and  
24 assisted Molycorp with exploration and  
25 predevelopment work for the underground mine?

1           A.       Would you repeat the question?

2           **Q.       We can look at the language, but do you**  
3           **recall this letter was complimentary of the**  
4           **professionalism and caliber of the Kennecott people**  
5           **who came to the Questa Mine and worked with you-all?**

6           A.       The basic purpose of this letter was I was  
7           objecting to their writing a report, taking all the  
8           credit for what was involved, and there were some  
9           definitely complimentary comments in the letter,  
10          yes.

11          **Q.       Sure.**

12                   **So, for example, you -- I guess the**  
13           **positive is, "I recognized that they made a major**  
14           **contribution during the two years they were on the**  
15           **project."**

16                   **That is referring to the Kennecott**  
17           **geologists, correct?**

18          A.       Correct.

19          **Q.       So although the partnership didn't come to**  
20           **full fruition, Molycorp's relationship with**  
21           **Kennecott ended on good terms, correct?**

22          A.       Ended up what?

23          **Q.       On good terms?**

24          A.       Yes, I would say certainly on business  
25          terms.

1           **Q.       Exactly.**

2           A.       Yeah.

3           **Q.       Okay. Mr. Dewey, changing subjects, as a**  
4           **former executive, you're familiar with the ownership**  
5           **history of the Questa Mine?**

6                   THE COURT: Counsel?

7                   MR. HOPSON: Yes, Your Honor, if we are  
8           changing subjects, might this be a good time to take  
9           a short break?

10                  MR. AUGUSTINI: Yes.

11                  THE COURT: Okay. 10-minute break.

12                  (A recess was taken.)

13                  THE COURT: You may be seated.

14                  Counsel, you may proceed.

15                  MR. AUGUSTINI: Thank you.

16                  Your Honor, I neglected to move the entry  
17           of CX130, it's the Chemical Bank memos that we  
18           discussed and --

19                  MR. HOPSON: No objection, Your Honor.

20                  THE COURT: Without objection, 130 is  
21           admitted.

22                  (Exhibit admitted, CX130.)

23           **Q       (By Mr. Augustini) Mr. Dewey, Molycorp**  
24           **acquired fee title to several hundred acres of land**  
25           **at the Questa Mine in the 1920s and the 1930s; is**

1     **that right?**

2           A.     Yes, sir.

3           **Q.     And that was the land on which Molycorp**  
4     **developed the open pit, correct?**

5           A.     Correct.

6                   MR. AUGUSTINI: Mr. Hambrick, please  
7     display CX453.

8           **Q.     (By Mr. Augustini) Mr. Dewey, this is an**  
9     **Exhibit prepared by one of Chevron's witnesses, Dr.**  
10    **Haddad.**

11                   And if you zoom in, you can see dates and  
12    **boundaries.**

13                   Do you have a general understanding of the  
14    **coverage of the patents that Molycorp obtained over**  
15    **time?**

16           A.     Yes, sir.

17                   MR. AUGUSTINI: Mr. Hambrick, please  
18    display the next version of this exhibit.

19                   And on this, just for ease of reference,  
20    we have shaded the area that is encompassed by  
21    Molycorp's patents in the 1920s and '30s.

22           **Q.     (By Mr. Augustini) Do you see that,**  
23    **Mr. Dewey?**

24           A.     That is the yellow area that says "Land  
25    Patent"?

1 Q. Yes, sir.

2 A. Yes, sir.

3 Q. And within the yellow area, if you see the  
4 photo behind it, is the open pit location, correct?

5 A. Yes, sir.

6 Q. And owning the land that encompassed the  
7 open pit was important to Molycorp in terms of being  
8 able to obtain financing from banks; is that right?

9 A. Having control of the land, yes, sir.  
10 Yes, sir. Yes.

11 Q. They wanted to know that you will be able  
12 to conduct your mining operations before they loan  
13 you tens of millions of dollars, generally, correct?

14 That is the concern?

15 A. Yes.

16 Q. And the open pit was the source of the  
17 molybdenum of the mining company in the 1960s and  
18 '70s, correct?

19 A. Correct.

20 Q. And the open pit was the waste rock that  
21 was dumped on the ground surface at the Questa Mine,  
22 correct?

23 A. Right.

24 Q. And once the mining was underway, the open  
25 pit's geology became a source of some significant



1 operational problems for Molycorp; is that right?

2 A. Yes.

3 MR. AUGUSTINI: Please display CX365.

4 Q. (By Mr. Augustini) Mr. Dewey, this is an  
5 e-mail, if you see the "From Tom Couzens, Colorado  
6 Springs."

7 Is that how you say his name?

8 A. Yes.

9 Q. Are you familiar with Mr. Couzens?

10 A. Yes, sir.

11 Q. What was his role in Molycorp?

12 A. Chief pit engineer.

13 Q. So he would have extensive familiarity  
14 with the open pit operation, correct?

15 A. Correct.

16 MR. AUGUSTINI: Turning to the third page  
17 of Mr. Couzens' e-mail, in the top right corner, if  
18 we can blow that up above the picture of Bob Larson.  
19 Above the picture, please. Okay.

20 Q. (By Mr. Augustini) Do you see Mr. Couzens  
21 states that he and a geologist, Gordon Gumble -- was  
22 he also a Molycorp employee?

23 A. Yes.

24 Q. -- were exploring the back side of the  
25 high west ridge in the summer of '67 and found some

1     **strange depressions?**

2                   **Are you familiar with what he is referring**  
3     **to, sir?**

4           A.     Yes, sir.

5           Q.     **And is the photo there, of Mr. Larson down**  
6     **inside of the crack, the evidence of a fault that**  
7     **was in the ridge that formed the back wall of the**  
8     **open pit?**

9           A.     It is not evidence of a fault, sir. It is  
10    evidence of a karst.

11          Q.     **Is it the crust?**

12          A.     Evidence of a crack of a karst --

13          Q.     **Oh, okay.**

14          A.     -- not evidence of a fault.

15          Q.     **Very good.**

16                   MR. AUGUSTINI: Go down a little bit,  
17    please, Mr. Hambrick.

18          Q.     **(By Mr. Augustini) Just below the picture**  
19     **of the -- on the top left, Mr. Couzens states,**  
20     **"There were some small one or two offsets that we**  
21     **realized were scars from tension cracks that had**  
22     **been there for years, covered by vegetation,**  
23     **partially healed but still obviously moving a bit."**

24                   **Is that a fair description of what**  
25     **Molycorp discovered on the back side of the ridge in**

1     **the summer of '67?**

2           A.     Yes.

3           Q.     And then he goes on to say, "Wow, we had  
4     **started mining in the middle of a huge failure rock**  
5     **that was part of the erosion process of Sulphur**  
6     **Gulch."**

7                   That was the situation you encountered in  
8     **the summer of '67?**

9           A.     Would you repeat the question?

10          Q.     This refers to the failure rock being  
11     **discovered.**

12                   Was that the situation Molycorp  
13     **encountered in the summer of '67?**

14          A.     Yes.

15          Q.     Did Molycorp not know there was a fault in  
16     **the back pit wall when it decided to do the open pit**  
17     **mine?**

18          A.     Again, in 1971, we employed then one of  
19     the world's best geotechnical experts, and they  
20     determined that this -- these tension cracks, this  
21     filled ground, was a result of the geology in that  
22     back wall.

23                   No fault was ever identified as such.  
24     This, in their opinion, was a result of weaker  
25     ground about halfway down through the mountain,

1 Golder Browne & Associates.

2 And that weaker ground allowed the upper  
3 portion of the mountain to collapse, start to  
4 collapse.

5 Q. I apologize with my terminology.

6 He refers to it as a fault but it is not  
7 important.

8 But the question was, was Molycorp aware  
9 of this, these tension cracks or weaker ground, as  
10 you described, before deciding to develop the open  
11 pit?

12 A. No, I don't believe they were.

13 Q. And because of that, Molycorp's pit design  
14 called for a relatively steep slope in the pit wall,  
15 correct?

16 A. The design was a conventional design that  
17 all mines are initially trying to achieve.

18 Q. And then the -- as it turned out, the  
19 conventional design was too steep given the weakness  
20 in the ground, correct?

21 A. In that particular portion of the pit  
22 wall, yes, sir.

23 Q. In the development of the pit, the initial  
24 activities of stripping and blasting, that  
25 exacerbated the weakness in the portion of the pit

1     **wall, correct?**

2           A.     Correct.

3           **Q.     Mr. Couzens states that "This area came to**  
4     **be known as Quivering Ridge."**

5                   **Is that a name you ever heard at Molycorp?**

6           A.     It is probably something that was passed  
7     around in the engineering department. I don't  
8     remember other than this report.

9           **Q.     Once the problem was detected, this was**  
10    **something that Molycorp had to monitor very**  
11    **carefully, correct?**

12          A.     The initial monitoring was very crude. It  
13    involved a couple of stakes in the ground and a  
14    piece of wooden lath.

15                   And the foremen were asked to go up and  
16    make a pencil mark so they could try to determine if  
17    there was any movement, and if so, how much. And --  
18    but that, I wouldn't call it extensive.

19          **Q.     It is certainly something that in the**  
20    **interest of the safety of the mining personnel and**  
21    **the equipment that would be tracked by Molycorp,**  
22    **correct?**

23          A.     Correct.

24                   MR. AUGUSTINI: Mr. Hambrick, please  
25    display CX240.

1           Q.        **(By Mr. Augustini) Mr. Dewey, the title at**  
2       **the top, the letterhead is -- references Anaconda**  
3       **Company.**

4                   **Is that a mining company?**

5           A.        Yes, sir.

6           Q.        **And the date is June 12, 1970?**

7           A.        Yes.

8           Q.        **And in the first full paragraph, there is**  
9       **a reference to a meeting that included you and other**  
10       **Molycorp personnel, as well as Anaconda, correct?**

11          A.        Correct.

12                   MR. AUGUSTINI: Your Honor, I move to  
13       admit CX240.

14                   MR. HOPSON: No objection, Your Honor.

15                   THE COURT: No objection, it is admitted.

16                   (Exhibit admitted, CX240.)

17                   THE COURT: Are CX153 and 136 already  
18       admitted?

19                   MR. AUGUSTINI: I believe so, Your Honor.

20                   Thank you.

21           Q        **(By Mr. Augustini) Mr. Couzens was also at**  
22       **this meeting with Anaconda, according to the memo?**

23           A.        Yes, sir.

24           Q.        **So did Molycorp invite Anaconda in to**  
25       **advise them of the pit instability issue?**

1           A.       Yes. They had a similar issue going on at  
2     the time, and they had some experience with --  
3     pre-dated our experience.

4                   MR. AUGUSTINI: If we can blow up,  
5     Mr. Hambrick, the very bottom.

6           Q.       **(By Mr. Augustini) Anaconda notes, at the**  
7     **bottom here, that "The slide problem at the Questa**  
8     **Mine is of special interest, in part, because the**  
9     **magnitude, 50 million tons of the slide, is as large**  
10    **or larger than any that have been known to exist in**  
11    **an open pit mine."**

12                   **Is that a correct assessment of the**  
13    **problem that Molycorp encountered in the late '60s,**  
14    **early '70s?**

15          A.       No. In fact, when they ultimately had  
16    their slide at Twin Boots, significantly larger than  
17    that.

18                   Just six or seven years ago, in the  
19    largest open pit in the world that you mentioned,  
20    they had a slide with the magnitude of well over  
21    100 million tons.

22                   So this -- yeah, this was one man's  
23    opinion of what this potential might be.

24                   It turns out, his estimate was, in fact,  
25    accurate when we did finally have a catastrophic

1 failure in 1977. The approximate estimate of debris  
2 involved in that failure was 50 million tons.

3 Q. I see.

4 So just in -- general speaking, there is  
5 no question that the pit wall instability was a big  
6 problem that Molycorp had to address to continue  
7 open pit mining, right?

8 A. Changed the whole paradigm, yes, sir.

9 Q. Okay.

10 MR. AUGUSTINI: Mr. Hambrick, please  
11 display CX131.

12 Q. (By Mr. Augustini) Mr. Dewey, there is a  
13 handwritten note on the cover page, "Original  
14 Feasibility Study."

15 Do you see that?

16 A. Yes, I do.

17 Q. And in your written testimony, you noted  
18 that the original mining plan for the pit  
19 involved -- planned for a two-to-one waste-to-ore  
20 ratio; is that right?

21 A. Correct.

22 Q. In other words, Molycorp planned to  
23 generate and dispose of 2 tons of waste rock from  
24 the pit for every 1 ton of ore that was provided to  
25 the mill, right?



1           A.       Yes, sir.

2           Q.       And Molycorp had to maintain an efficient  
3       ore-to-waste ratio in order to continue to draw the  
4       bank funds and pay back the money it had borrowed  
5       from the banks to operate the pit, correct?

6           A.       Very definitely.

7           Q.       So the whole idea of the mining plan was  
8       to produce sufficient or to generate the cash flow  
9       needed to pay all expenses and repay the loans,  
10      right?

11          A.       Correct.

12                   MR. AUGUSTINI: Let's turn to page 96 of  
13      CX131, please.

14          Q.       (By Mr. Augustini) One of the issues that  
15      the Molycorp feasibility study for the open pit mine  
16      had to address was what to do with the waste rock,  
17      correct?

18          A.       Correct.

19          Q.       And is this table indicating that the  
20      original plan was to generate approximately  
21      31 million tons of waste rock?

22          A.       That is correct.

23          Q.       I'm sorry, I think I misspoke, Mr. Dewey.  
24                   I believe the table references cubic  
25      yards?

1           A.     I stand corrected as well. Thank you.

2           Q.     Yes, that is my mistake.

3                   Do you have an approximation for how that  
4   converts to tons at all?

5           A.     1.7 tons to a cubic yard.

6                   And in our case, it varies depending upon  
7   the propensity of the rock.

8           Q.     Yeah, that's what I was figuring for that  
9   roughly 55 million tons, total.

10                   And according to the waste-dump areas  
11   section that is just below there, there is a  
12   reference to various waste dumps, correct?

13          A.     Yes.

14          Q.     And then the total capacity is listed in  
15   that table, correct?

16          A.     Correct.

17          Q.     And it is 68 million tons -- cubic yards,  
18   excuse me, approximately, correct?

19          A.     Correct.

20          Q.     So this feasibility study indicates that  
21   the dump capacity at the time the open pit was to  
22   begin was more than sufficient to accommodate the  
23   31 million cubic yards of waste expected, correct?

24          A.     Correct.

25          Q.     But then with the pit wall, it became

1 clear that the original mining plan was no longer  
2 doable, right?

3 A. Yes.

4 Q. You testified at your deposition, in 1968  
5 and '69, you were working night and day to find a  
6 financially-viable way to continue with the open pit  
7 mining, correct?

8 A. Correct.

9 Q. And I think the term you used at your  
10 deposition was that the solution involved generating  
11 tremendous amounts of waste rock compared to the  
12 original plan?

13 A. Right.

14 Q. And to put some quantification on it, the  
15 waste-to-ore ratio went from two-to-one in the  
16 original plan to roughly ten-to-one; is that right?

17 A. At times ten-to-one, the overall ratio was  
18 a little less than ten-to-one.

19 Q. So the revised mining plan would generate  
20 somewhere between four, roughly four times more than  
21 originally expected, correct?

22 A. Yes.

23 Q. And that is why the total waste generated  
24 by the open pit mine eventually was so much higher,  
25 correct?

1           A.       Correct.

2           Q.       And the increased cost of handling the  
3 waste rock that was necessary to flatten the pit  
4 slope, that had to be offset by increased revenue,  
5 correct?

6           A.       Correct.

7           Q.       Revenue had to cover the increased costs.  
8                   And so did that mean that Molycorp had to  
9 expand its mill operation?

10          A.       Yes, sir.

11          Q.       And that meant that additional tailings  
12 would be generated and disposed at the offsite  
13 location, correct?

14          A.       Right.

15                   MR. AUGUSTINI: Mr. Hambrick, USX016,  
16 please.

17          Q.       (By Mr. Augustini) Mr. Dewey, we displayed  
18 USX016, the title page, "Molycorp Questa Expansion  
19 Proposal, August 28, 1968."

20                   Do you see that?

21          A.       Yes, sir.

22          Q.       Mr. Lansing is down at the bottom.  
23                   He was a senior executive at Molycorp?

24          A.       He was the general manager.

25          Q.       Did you work on the Questa expansion

1     **proposal?**

2           A.     Yes, sir.

3                   MR. AUGUSTINI:   Your Honor, I move to  
4     admit USX016.

5                   MR. HOPSON:   No objection, Your Honor.

6                   THE COURT:   Without objection, admitted.  
7                   (Exhibit admitted, USX016.)

8           **Q     (By Mr. Augustini) Was this proposal**  
9     **prepared in response to the problems found in the**  
10    **back wall of the pit?**

11          A.     Yes.

12                  MR. AUGUSTINI:   If we turn to the fourth  
13     page, Mr. Hambrick.

14          **Q.     (By Mr. Augustini) There is a table there.**  
15                  **This proposal, Mr. Dewey, quantifies the**  
16     **tonnage of additional waste that would be generated**  
17     **under the revised plan for the open pit; is that**  
18     **right?**

19          A.     That is correct, sir.

20          **Q.     219 million tons, roughly, according to**  
21     **the total in the table -- oh, I'm sorry, 210.**

22          A.     Ten, yes.

23          **Q.     And the cost associated with that waste**  
24     **handling would be a little bit more than**  
25     **\$25 million; is that right?**

1           A.     Yes, sir.

2           Q.     And even in light of the additional cost  
3     from the waste-rock handling and disposal, the  
4     company still developed a plan that it projected  
5     would be profitable in the long run, correct?

6           A.     That is correct.

7                   MR. AUGUSTINI: Mr. Hambrick, please  
8     display USX583.

9           Q.     (By Mr. Augustini) Mr. Dewey, do you see  
10    that the upper right-hand corner references Utah  
11    Construction & Mining Co.?

12          A.     Yes, sir.

13          Q.     Are you familiar with that company?

14          A.     Yes, sir.

15          Q.     Were they a consultant for Molycorp?

16          A.     Yes, sir.

17                   MR. AUGUSTINI: I move to admit USX583.

18                   MR. HOPSON: No objection, Your Honor.

19                   THE COURT: Without objection, 583 is  
20    admitted.

21                   (Exhibit admitted, USX583.)

22          Q     (By Mr. Augustini) Did you use Utah's --  
23    you mentioned Fluor -- Fluor Utah Construction in  
24    your direct testimony.

25                   Is that the same company we are talking

1     **about?**

2           A.     Yes, it is.

3           **Q.     They are based in San Francisco?**

4           A.     Correct.

5           **Q.     Did you use Utah Construction's work to**  
6     **develop the revised feasibility study?**

7           A.     Yes, we did, both from an engineering  
8     standpoint and, ultimately, it was one of the first  
9     companies we were able to get these feasibility  
10    studies, that I was doing by hand, computerized.

11           MR. AUGUSTINI:  If we could pull out a  
12   bit, Mr. Hambrick.

13           **Q.     (By Mr. Augustini) Mr. Dewey, there is a**  
14     **column for "Bench," correct, on the left-hand side?**

15           A.     That is correct.

16           **Q.     And does that refer to the elevations**  
17     **within the pit?**

18           A.     Yes.

19           **Q.     And then there is a column for "Waste**  
20     **Tons," second from the right, correct?**

21           A.     Yes.

22           **Q.     Does that refer to the amount of waste at**  
23     **that elevation that would be generated under the**  
24     **revised mining plan?**

25           A.     Yes, sir.

1           **Q.       And can you explain -- there is no ore in**  
2       **the ore column from 10,160 feet down to 9,000 feet.**

3                   **Can you explain what was going on there,**  
4       **please?**

5           A.       Yes.

6                   If you envisioned this ore deposit as an  
7       elongated watermelon, and it is dipping down under  
8       this 10,000-foot high mountain at a 22-degree angle,  
9       we started at the top of the mountain and sliced the  
10      slice -- sliced down, took approximately five years  
11      to remove enough waste to expose approximately a  
12      year-and-a-half worth of ore.

13                  So we had three contiguous slices coming  
14      down the mountain, and these tons reflected the  
15      total on that level.

16           **Q.       So in other words, to take the weight off**  
17       **of the weak ground that is below, I know it is**  
18       **imprecise, but essentially, the plan was to remove**  
19       **part of the ridge above the weak ground; is that**  
20       **generally correct?**

21           A.       That is the whole reason for going to the  
22      top of the mountain, yes, sir.

23           **Q.       And you testified at your deposition --**  
24       **well, one further question on this.**

25                   **The fact that so much waste had to be**



1 removed before you get to the ore, that put a lot of  
2 financial strain on Molycorp, correct?

3 A. Correct.

4 Q. And you testified that -- at your  
5 deposition, you remembered going to New York  
6 headquarters in the summer of '69 to obtain approval  
7 for the revised plan; is that right?

8 A. Yes, sir.

9 Q. And ultimately, Molycorp's executives and  
10 board of directors made the call to proceed with the  
11 Utah construction plan; is that right?

12 A. Yes.

13 Q. And to sum it up, Molycorp did what is  
14 necessary to protect its sizable investment in the  
15 pit up through that point, correct?

16 A. It was either that or declare bankruptcy,  
17 which was not an option.

18 Q. Yes.

19 A. We had -- the entire Northern New Mexico  
20 was dependent upon that mine and to walk away from  
21 it at that point in time, the lives of thousands of  
22 people would have been impacted in a very negative  
23 way.

24 And it was as much of a consideration of  
25 taking this gamble as anything, we felt.

1           Q.       Sure.

2                   And that was Molycorp's decision to  
3 proceed, correct?

4           A.       Yes, it was.

5           Q.       Now, you mentioned when all of this  
6 additional waste is generated under the revised  
7 mining plan, that creates a problem with respect to  
8 dump space, right?

9           A.       Major problem.

10          Q.       Do you recall that one of the options  
11 Molycorp considered was obtaining a special use  
12 permit to locate the waste rock on patented claims?

13          A.       That was discussed, yes, sir.

14                   MR. AUGUSTINI: Mr. Hambrick, please  
15 display CX179.

16          Q.       (By Mr. Augustini) Mr. Dewey, do you  
17 recall an engineer by the name of W.K. Pincock?

18          A.       Yes. He was the chief engineer at that  
19 time.

20          Q.       And this time referenced in this exhibit  
21 is June 6, 1967, correct?

22          A.       June 6, yes.

23                   MR. AUGUSTINI: And just down to the very  
24 bottom of the document, please.

25          Q.       (By Mr. Augustini) Mr. Pincock advises of

1     Mr. Lansing in this memo that "Long-range plans are  
2     in progress with respect to tailings area and dump  
3     room. We are currently working toward a long-range  
4     special use permit from the Forest Service."

5                     So is that consistent with your  
6     recollection, that was one of the options in the  
7     late '60s?

8             A.     Yes.

9             Q.     Okay.

10                    MR. AUGUSTINI: Mr. Hambrick, please  
11     display CX204.

12             Q.     (By Mr. Augustini) Mr. Dewey, you  
13     mentioned, in your direct testimony, John Watson,  
14     Watson & Watson law firm.

15                    Was that Molycorp's counsel?

16             A.     Yes, sir.

17             Q.     And the date of this letter is July 26,  
18     1968.

19                    Do you see that, sir?

20             A.     Yes, that is correct.

21             Q.     And then in the first sentence, Mr. Watson  
22     references a conversation he had with Mr. Kentro  
23     regarding acquisition of dump areas, right?

24             A.     Yes.

25             Q.     So this goes back to the need to find

1     **space for the waste rock under the revised plan,**  
2     **right?**

3           A.     It is in the same time frame.

4           MR. AUGUSTINI:   Turning to the second --  
5     top of the second page, please.  If you could blow  
6     up the first paragraph.

7           Q.     **(By Mr. Augustini) Do you see the sentence**  
8     **where Mr. Watson advises he is reluctant to**  
9     **recommend the special use permit approach to**  
10    **Molycorp?**

11          A.     I guess I see that sentence, sir.

12          Q.     **And one of the problems he mentions with a**  
13    **special use permit is the company could be subject**  
14    **to some kind of future regulation from the Forest**  
15    **Service, right?**

16          A.     Not only future but current.  They could  
17    withdraw it at any time.

18          Q.     **So that is why it is -- special use**  
19    **permits might be viewed as less desirable than**  
20    **owning the land outright, correct?**

21          A.     Correct.

22          MR. AUGUSTINI:   Scroll down, please,  
23    Mr. Hambrick.

24          Q.     **(By Mr. Augustini) With respect to mill**  
25    **sites, Mr. Dewey, were you aware -- were you aware**

1     that Molycorp would have to demonstrate some use of  
2     the land --

3           A.     Yes.

4           Q.     Before obtaining ownership of a mill site  
5     claim?

6           A.     Yes, sir.

7           Q.     Were you also aware that if Molycorp  
8     wanted to obtain fee title to the land that was  
9     covered by a mill site, that the statute, the mining  
10    law, required those patents to be limited to just  
11    5 acres; is that your recollection?

12          A.     Yes.

13          Q.     So if Molycorp wanted to obtain 50 acres  
14    for waste-rock dump purposes or any other purposes  
15    through a mill site patent, that can't be done,  
16    correct, in one patent because you are limited to  
17    5 acres?

18          A.     Each individual claim is limited to  
19    5 acres, yes, sir.

20          Q.     So if you have your eyes on a 50-acre  
21    section of land that you would like to use, you  
22    can't take ownership of it all under one mill site  
23    patent, right, because of the 5-acre limitation?

24          A.     The -- Ed Torgerson, the chief engineer,  
25    devised a plan that worked around that issue by

1 stacking mill-site claims, one next to the other,  
2 and having the extension of the claim long enough to  
3 cover what was going to be used.

4 And we staked such claims in Capulin  
5 Canyon.

6 Q. Well, yes, Mr. Dewey, but one thing is  
7 clear, if you are planning to dispose of a large  
8 quantity of waste rock, you don't want to be limited  
9 to 5-acre increments, correct?

10 A. Right.

11 As I said, he had a -- he had a plan on  
12 paper which -- on paper and the field that  
13 accomplished that objective by narrow 2-foot wide by  
14 2,000-foot long claims, one after the other, in a  
15 fan shape or whatever was required, and encompassed  
16 that entire canyon.

17 Q. Okay. But you do understand that use  
18 would have to be demonstrated. You can't obtain  
19 ownership for land that you may use in the future,  
20 correct?

21 You have to demonstrate a current use.

22 Is that your understanding?

23 A. Yes, that is correct.

24 Q. Okay. Molycorp was interested in  
25 acquiring space for the future use for waste-dumping

1     **purposes, correct?**

2           A.     Correct.

3           **Q.     And there was a meeting in January of 1969**  
4     **with the Forest Service to discuss how that might be**  
5     **possible, correct?**

6           A.     Correct.

7           **Q.     During that meeting, Molycorp raised the**  
8     **idea of possibly using the Red River Valley itself**  
9     **as a waste-dump location, correct?**

10          A.     Using the Red River Valley for waste rock  
11     to access the south side of the highway, yes, sir.

12          **Q.     But there would be substantial quantities**  
13     **of waste sitting within the Red River Valley**  
14     **floodplain under this concept, correct?**

15          A.     That is enough waste to create a  
16     right-of-way over.

17          **Q.     Right across the river and over to the**  
18     **Carson National Forest on the other side.**

19          A.     Exactly.

20          **Q.     And you didn't attend the meeting in**  
21     **January of 1969 but you certainly were aware of it**  
22     **and heard about it, correct?**

23          A.     Correct.

24          **Q.     This concept would have required shutting**  
25     **down and relocating the state highway that ran**

1     **around the mine?**

2           A.     Shutting down the state highway?

3           **Q.     Yeah, relocating it, if there is going to**  
4     **be a waste pile that stretches across the canyon?**

5           A.     Relocated? I don't think necessarily it  
6     would have entailed shutting it down for any period  
7     of time.

8           **Q.     Did Molycorp present this idea to anyone**  
9     **other than the Forest Service at that one meeting?**

10          A.     I think there is a reference earlier by  
11     forester, head forester John Hart in some  
12     memorandums I have seen from John Hart, seem to  
13     indicate that John was aware of the plan.

14                 We had a very close relationship with him,  
15     and Al Greslin would stop by and have coffee at the  
16     ranger station and so on.

17                 So I don't know this personally but from  
18     what I read, I believe there was some pre-knowledge  
19     on at least the part of the head forester of Carson  
20     National Forest, John Hart.

21          **Q.     Before the January '69 meeting?**

22          A.     Right.

23          **Q.     How about the State of New Mexico**  
24     **agencies, any communications, discussions of the**  
25     **idea with them?**



1           A.       Not that I am aware of.

2           **Q.       The tailings pipelines that connected the**  
3           **mill to the disposal area offsite, those would also**  
4           **have to be addressed under this proposal, correct,**  
5           **because they run along the road?**

6           A.       Yeah, that is probably a three-day job.

7           **Q.       Okay. But up to -- before January '69,**  
8           **the tailings pipelines had attracted negative**  
9           **publicity?**

10                   Without getting into the specifics of it,  
11           **there were concerns about the pipelines before that,**  
12           **correct?**

13           A.       That is correct.

14           **Q.       Environmental concerns?**

15           A.       Yes.

16           **Q.       Did Molycorp do any outreach to the**  
17           **public, all the people that recreate in the area,**  
18           **about this plan?**

19                   MR. HOPSON: Objection, Your Honor.  
20           Assumes facts not in evidence regarding "all the  
21           people who recreate."

22                   THE COURT: I'm sorry, I can't understand  
23           what you just said.

24                   MR. AUGUSTINI: I will rephrase,  
25           Your Honor.

1 THE COURT: Pardon?

2 MR. AUGUSTINI: I will rephrase my  
3 question.

4 THE COURT: All right. Thank you.

5 Q (By Mr. Augustini) Did Molycorp do any  
6 outreach to the public about this concept?

7 A. No, not that I am aware of.

8 Q. You mentioned Al Greslin was involved in  
9 this.

10 Did you hear from him, after the meeting,  
11 that there was a way in which Molycorp could obtain  
12 ownership of the land it needed to continue the  
13 disposal mining and disposal of the waste rock?

14 A. He, along with Lansing, the general  
15 manager, who probably heard it first from Lansing,  
16 because we rode to work and back every day together,  
17 explained that the idea was rejected out of hand,  
18 more or less, by the Albuquerque officials and  
19 somebody threw out the idea of a land exchange.

20 Q. So the land exchange will give the  
21 Molycorp ownership of the land it needs for the  
22 dumps, correct?

23 A. No.

24 Land exchange -- land exchange would give  
25 Molycorp a place to put that dump immediately, which

1 is what was required. We had to have a place right  
2 now.

3 But it was not -- the land exchange is the  
4 reason we are here today.

5 If we would have been able to go across  
6 that highway and put this waste where they wanted to  
7 put it, there would not be 350,000 -- million tons  
8 there.

9 We talked about the dump planning. All  
10 the dump planning that was done was to try to figure  
11 out how to get all of this waste in this limited  
12 hillside.

13 If we'd had had a road going across, as we  
14 envisioned, to those big canyons on the other side,  
15 it would be an entirely different situation.

16 **Q. But nevertheless, you said there was an**  
17 **immediate need for space now.**

18 **Do you remember that?**

19 A. Either that, or shut down.

20 **Q. You weren't going to shut down, correct?**

21 A. We had made a decision not to, if we could  
22 help it.

23 **Q. So when the Forest Service made this**  
24 **suggestion, the company embraced it, correct?**

25 A. That is correct.

1           **Q.       And you testified at your deposition,**  
2       **within a few weeks of the meeting, Al Greslin had**  
3       **found a suitable parcel of land adjacent to the**  
4       **Carson National Forest that the company could offer**  
5       **to the Forest Service to trade, right?**

6           A.       That was my testimony. That was my  
7       understanding, at the time.

8                   I think I have since learned the  
9       acquisition of those parcels predated that meeting.

10          **Q.       We will get to that in just a second.**

11                   **So what you are saying now is the company**  
12       **had already identified land that could be traded**  
13       **with the Forest Service years before this meeting in**  
14       **1969, correct?**

15          A.       I believe that Forest Service identified  
16       those parcels and very specifically wanted that land  
17       because the hippies were encroaching upon the  
18       National Forest and that those parcels were  
19       complicated land surveys and so on.

20                   My view that during the feasibility  
21       studies in the early '60s, when they were doing all  
22       the planning, as you pointed out, to come up with  
23       land, the possibility of land exchanges were  
24       discussed, and foresters identified those two  
25       parcels.

1           Al Greslin, that was his job to get leases  
2   for tailings land, for right-of-ways, whatever, and  
3   so he acquired that property at that time.

4           MR. AUGUSTINI: So let's take a look at  
5   USX587. We will bring this into focus perhaps.

6           Q.     **(By Mr. Augustini) Mr. Dewey, do you**  
7   **recognize this option agreement between, would you**  
8   **say Rael's and Gaillours --**

9           A.     Yes, sir.

10          Q.     **-- and MolyCorp?**

11          A.     Yes, sir.

12          Q.     **And the date is February 21, 1964?**

13          A.     Yes, sir.

14          Q.     **So this is five years, approximately,**  
15   **before the January, 1969 meeting with the Forest**  
16   **Service?**

17          A.     Correct.

18          Q.     **And is it your understanding then that**  
19   **this is the option agreement for the La Lama Land?**

20          A.     Correct.

21          Q.     **And the La Lama Land was the parcel that**  
22   **MolyCorp ended up offering to the Forest Service for**  
23   **the land exchange, correct?**

24          A.     Actually, two parcels.

25          Q.     **Two parcels, correct?**

1           And the option agreement itself states  
2   that the purpose of it was to trade, trade the land  
3   to the Forest Service for some potential use in the  
4   future, right?

5           A.     That is correct.

6           Q.     It wasn't necessarily for the land  
7   exchange in mind at the time but you knew that you  
8   might have a need to do a land exchange with the  
9   Forest Service at some point in connection with your  
10   operation, correct?

11          A.     Yes, sir.

12          Q.     Okay.

13                 MR. AUGUSTINI: And let's turn to CX212.

14          Q.     (By Mr. Augustini) Mr. Dewey, again, you  
15   see the letterhead from the Watson & Watson law  
16   firm?

17          A.     Yes, sir.

18          Q.     And the date is February 20, 1969?

19          A.     Yes.

20          Q.     The letter is sent to Mr. Taylor at the  
21   Forest Service, correct?

22          A.     Correct.

23          Q.     And in the first sentence, Mr. Watson  
24   states, "I have been authorized by Mr. Lansing,  
25   manager of the Molybdenum Corporation Mine in

1      Questa, New Mexico, to make application to you on  
2      behalf of the corporation for the exchange of the  
3      land designated as parcel one and parcel two on the  
4      enclosed map."

5                      Correct?

6              A.      Correct.

7              Q.      So within three weeks of the meeting, the  
8      company's attorney is sending a letter to the Forest  
9      Service saying we would like to apply for the land  
10     exchange, correct?

11             A.      Right.

12             Q.      And from that point forward, you testified  
13     at your deposition, under the revised mining plan,  
14     Molycorp's cost calculations took into account the  
15     fact that the land exchange would come to fruition;  
16     is that right?

17             A.      That's correct.

18             Q.      So, based on the meeting, Molycorp assumed  
19     that it would become the owner of all the land that  
20     was subject to the exchange, correct?

21             A.      Correct.

22             Q.      And that took -- it took a while but  
23     that's what came to pass, correct?

24             A.      Correct.

25                     MR. AUGUSTINI: Let's turn to CX248,

1 please.

2 Q. (By Mr. Augustini) Mr. Dewey, do you  
3 recognize the name C.A. Campbell?

4 A. Yes, I do.

5 Q. And was he the president of Molycorp?

6 A. No. He was a -- he was hired sometime  
7 around early 1970 from International Mining in  
8 Canada, as general manager.

9 The general manager of the mine that hired  
10 me resigned and for a period of about four or  
11 five months, between September and December of 1969,  
12 I was the acting manager.

13 And we were looking for somebody to  
14 replace the position of general manager, and Colin  
15 Campbell was hired for that position.

16 Q. So at the time of this memo, he is likely  
17 to be the general manager at Questa Mine?

18 A. He definitely was.

19 Q. And Mr. Torgerson, again, was part of the  
20 engineering department?

21 A. Yes, sir.

22 Q. And do you understand this memo to be  
23 providing an estimate for the costs if Molycorp were  
24 to obtain mill sites for the land covered by the  
25 exchange?



1           A.     Yes, sir.

2           Q.     And again, he is referencing in this  
3     5-acre mill site claim?

4           A.     Correct.

5           Q.     And to cover 2,000-plus acres, or I guess  
6     not all but -- just to step back for a second, the  
7     land exchange covered over 2,000 acres, correct?

8           A.     Yes.

9           Q.     That is what Molycorp acquired?

10          A.     Yes, sir.

11          Q.     And there was never any intention to use  
12     all of the 2,000-plus acres for waste dumping,  
13     correct?

14          A.     Just a portion.

15          Q.     Yeah.

16          A.     Just to get across the highway to the  
17     other side.

18          Q.     Now, excuse me, Mr. Dewey, the 2,000 acres  
19     acquired from the Forest Service or the  
20     United States, for the -- for the land exchange,  
21     some of that would be used for dumping waste rock  
22     but most of it was other land, correct?

23          A.     No. If you look at the photographs you  
24     showed earlier, all of the dumps along the north  
25     side of the highway start from Sugar Shack to the

1 extreme south and worked their way across that  
2 entire area.

3 Now, I don't know that --

4 Q. I don't mean to cut you off. I am not  
5 asking my questions very well.

6 There are not waste rock piles on all of  
7 the 2,000 acres that were acquired, correct?

8 A. I can't honestly answer that. I don't  
9 know. I would have to look at a survey plat. There  
10 might be a few acres in there that are not covered  
11 by rocks.

12 Q. But part of the land that was acquired  
13 through the exchange, for example, would cover the  
14 surface above the underground mine to the -- to the  
15 right, right?

16 A. Right. I believe that's correct, yes.

17 Q. Okay.

18 A. Yes, it definitely is.

19 Q. All the way up to the western boundary of  
20 the mine?

21 A. Yes, sir.

22 Q. Now, don't you agree, as an economic  
23 proposition, the price that Molycorp paid for the  
24 Lama Land was quite reasonable given Molycorp's  
25 tremendous needs in 1969 to continue operating the

1     open pit and then the thousand of acres that it  
2     received from the Forest Service in return?

3             What was the price of the Lama Land that  
4     was purchased under the option?

5             A.     Something close to \$100,000.

6             Q.     And in return, Molycorp received  
7     2,000-plus acres, correct?

8             A.     Yeah. Yes, 2,000-plus acres of  
9     hydrothermally scarred mountain side, yes, sir.

10            Q.     And you were able to continue mining for  
11     another ten-plus years as a result, correct?

12            A.     Correct.

13            Q.     Forest Service didn't extract a profit on  
14     the land exchange, correct?

15            A.     It is an even exchange, intended to be,  
16     right?

17            THE COURT: Counsel, how does he know what  
18     the Forest Service considered a profit? He would  
19     have no idea.

20            Move on.

21            MR. AUGUSTINI: Will do.

22            Mr. Hambrick, please display CX282.

23            Q.     (By Mr. Augustini) Mr. Dewey, you  
24     mentioned this document in your direct testimony,  
25     the Molycorp Interim Feasibility Study in February,

1     **1972?**

2           A.     Yes, sir.

3           **Q.     And this was for future planning**  
4 **post-1976, right?**

5           A.     Correct.

6                   MR. AUGUSTINI: If we turn to page 34,  
7 please.

8           **Q.     (By Mr. Augustini) Maybe I will try asking**  
9 **first.**

10                   **This document involved future planning for**  
11 **either another open pit or an underground mine,**  
12 **correct?**

13          A.     It is not for another open pit. This is  
14 for an existing open pit, to the best of my  
15 recollection.

16          **Q.     Well, there was another ore body or ore**  
17 **that was available and the company was considering**  
18 **what method of mining to use to extract that ore,**  
19 **correct?**

20          A.     The portion of the over-deposit for the  
21 mineral deposit, it was the underground portion.

22                   You know, I was not involved in this  
23 memorandum, I don't believe.

24                   This has to do with what we were doing at  
25 the time.

1           Q.     All right.

2                   MR. AUGUSTINI:  Let's turn to page 20,  
3     please.

4           Q.     (By Mr. Augustini) This document,  
5     Mr. Dewey, references immediately available dumps;  
6     is that correct?

7                   Both immediately available and possible  
8     future?

9           A.     Yes, A, B and C, correct.

10          Q.     And the immediately available dumps would  
11     include the locations that are listed.

12                  Those are within the Questa Mine boundary,  
13     correct?

14          A.     Correct.

15          Q.     And the possible future dumps, those don't  
16     exist yet as of this time, correct?

17          A.     Those are the dumps on the south side of  
18     the river.

19          Q.     Right.

20                  So they are theoretically available  
21     possibly at some point in the future, right?

22          A.     That was our hope.

23          Q.     But as it turned out, the space across the  
24     river wasn't needed because the second -- the next  
25     phase of mining that Molycorp chose to pursue was an

1     underground mine, right?

2           A.     The underground mine did not require any  
3     significant amount of waste, that's correct.

4           Q.     So once that decision was made, the  
5     company knows its existing capacity within the mine  
6     isn't going to be a problem because, as I under --  
7     could you just describe how the block caving process  
8     works and how that relates to what gets to the mill,  
9     please?

10          A.     Well, you have asked two questions there.  
11                 Can I answer the first one?

12          Q.     Let me try it again. I apologize.

13          A.     That is all right.

14          Q.     Under the block caving process, as I  
15     understand it, generally there are grizzlies that  
16     the ore is on top of a grizzly system, it passes  
17     through these grizzlies, it is carted to the mill,  
18     correct, generally?

19          A.     Correct.

20          Q.     So everything that is extracted from the  
21     underground mine gets processed and that results in  
22     tailings, correct?

23          A.     Correct.

24          Q.     So the surface disposal is not a factor as  
25     you have mentioned, right?

1           A.       Correct.

2           **Q.       If we can turn to --**

3           A.       Sir, may I back up to the first statement  
4       you made before you get to the block caving?

5                    When you said -- could you repeat that?  
6       Do you remember what you said?

7           **Q.       About the grizzlies?**

8           A.       Before the grizzly, before you mentioned  
9       block caving, you mentioned that we had enough land  
10      for what we needed to do here or something.

11          **Q.       It is a simple point, we covered that when**  
12      **it comes to the underground block cave mine, the**  
13      **surface disposal waste is no issue, correct?**

14                   **That is all I was getting at.**

15          A.       Correct.

16                   MR. AUGUSTINI: Let's turn to page 38 of  
17      the interim feasibility study.

18                   There is a lot here but this section is  
19      entitled "Landownership, Claims, Leases and  
20      Patents."

21                   And then down in the fourth or fifth  
22      paragraph, "recently, several proposals," can you  
23      blow that up, please.

24          **Q.       (By Mr. Augustini) If you would take a**  
25      **minute now -- just take to look at that now,**

1     **Mr. Dewey, please.**

2           A.     Yes, I see that.

3           **Q.     Was one of Molycorp's concerns that there**  
4     **might be changes in the mining law that would impact**  
5     **its business?**

6           A.     Every mining company in the world.

7           **Q.     And so part of the discussion here in this**  
8     **interim feasibility plan for the future mining --**

9                   MR. AUGUSTINI: If we turn to the next  
10    page.

11          **Q.     (By Mr. Augustini) -- there is a paragraph**  
12     **that says, "The effects of these measures on**  
13     **Molycorp's unpatented claims is readily apparent.**  
14     **The company will not control all the mineral land it**  
15     **is will need in the Questa Red River area."**

16                   And do you see that passage, Mr. Dewey?

17          A.     Yes, I do.

18          **Q.     And then it goes on to say, "It is**  
19     **necessary to proceed with a land exchange."**

20                   Correct?

21          A.     It is necessary to complete that and the  
22     mineral claims in the log cabin area.

23          **Q.     And it continues, "The land exchange in**  
24     **progress with BLM, that would give fee simple title**  
25     **to an additional 2250 acres on the west side."**



1           A.       Okay.  Yes, I'm sorry I see that, that  
2   2250.

3           Q.       So in light of this concern about maybe  
4   the mining law would change this document, the  
5   Interim Feasibility Study, states that It is very  
6   important to get the land.  That is the subject of  
7   the land exchange, correct?

8           A.       Correct.

9                   MR. AUGUSTINI:  Let's turn to CX245,  
10  please.

11          Q.       (By Mr. Augustini) Mr. Dewey, you may  
12   recall, I believe you have mentioned this memorandum  
13   in your direct testimony?

14          A.       Yes.

15          Q.       Written by John Miller, I believe?

16          A.       Yes, sir.

17          Q.       He was one of the engineers on Molycorp's  
18   staff?

19          A.       Yes, he was.

20          Q.       And he mentions his concerns about dump  
21   stability as of December, 1970, correct?

22          A.       Correct.  He was very concerned.

23          Q.       I mean -- and just to put some detail on  
24   that, one of the concerns is certainly that the  
25   waste piles are standing above the state highway,

1 correct?

2 A. Correct.

3 Q. And so this memo was prepared during the  
4 time that the company was pursuing the land  
5 exchange, correct?

6 A. This memo, I believe, postdated the  
7 decision to make the land, yes.

8 Q. Okay.

9 MR. AUGUSTINI: Let's show USX482, please.

10 Q. (By Mr. Augustini) Mr. Dewey, you may  
11 recognize your signature on this first page of the  
12 August 23 memo; is that right?

13 A. Yes.

14 Q. And this was to Mr. Kostuik?

15 A. Kostuik, yes, sir.

16 Q. Kostuik.

17 The subject is "Dump Plans Five Years."

18 A. Yes, sir.

19 Q. Molycorp was always looking out into the  
20 future in terms of what it needs maybe for the  
21 mining, correct?

22 A. Daily, weekly, monthly, five years, it was  
23 a continual process.

24 Q. And here you ask for Mr. Kostuiks' input  
25 regarding plans for the open pit mine continuing,

1       **correct?**

2           A.       Correct.

3                   At that time he was the -- had a position  
4       of vice president and general manager of Molycorp,  
5       so I reported directly to him.

6                   And we would spend about a week or so a  
7       month at the mine, and we would work together to try  
8       to resolve these kind of issues.

9           **Q.       And so if I understand it, you need to**  
10       **know what the mine plan is to know how to plan for**  
11       **the future waste handling or dump storage, correct?**

12          A.       Correct.

13                   THE COURT: Counsel, is this a good time  
14       to take our noon recess?

15                   MR. AUGUSTINI: Yes, it is, Your Honor.

16                   THE COURT: All right. Let's be in recess  
17       until 1:30.

18                   (A recess was taken.)

19                   THE COURT: You may proceed.

20          **Q.       (By Mr. Augustini) Good afternoon,**  
21       **Mr. Dewey?**

22          A.       Good afternoon.

23                   MR. AUGUSTINI: Mr. Hambrick, please  
24       display CX281.

25          **Q.       (By Mr. Augustini) Mr. Dewey, on your**

1     direct testimony I believe you also cited the Forest  
2     Services 1972 environmental assessment related to  
3     the land exchange.

4             Do you recall that?

5             A.     Yes, sir.

6             Q.     Did you receive a copy of this in 1972?

7             A.     Yes.

8             Q.     I would like to turn to the second page of  
9     CX281. Do you recall that one of the statements in  
10    the environmental assessment had to do with the, one  
11    of the rationales was that the exchange would  
12    facilitate Molycorp's planning and development of  
13    the mining dumps?

14            A.     Yes, I do.

15            Q.     And then on Page 6 the environmental  
16    assessment notes that in the Forest Service view  
17    Molycorp's mining would continue?

18            A.     Page 6? I'm sorry, Page 5 is on the  
19    screen. Okay.

20            Q.     The question was about the second sentence  
21    there, "The mining activities will still continue on  
22    the patented mining claims or on mill sites and are  
23    not dependent upon the approval or disapproval of  
24    this land exchange proposal."

25                   And that was Molycorp's intention, to

1     **continue mining one way or the other, correct?**

2           A.     That was our intention to try to keep the  
3     mine going, yes, sir.

4           Q.     And Molycorp had been mining from the time  
5     we saw the February '69 letter that Mr. Watson sent  
6     applying for the exchange through this point, which  
7     was 1972, correct?

8           A.     Correct.

9           Q.     And Molycorp also continued to mine  
10    between 1972 and 1974 when the land exchange finally  
11    was completed and Molycorp took title to the land,  
12    correct?

13          A.     Yes, sir.

14          Q.     If we can move to the PDF Page 8, I  
15    believe that would be 7 of the report. There is a  
16    sentence I will read for the record, Mr. Dewey.

17                 "If the company is able to acquire the  
18    entire dump site, it plans to develop it in an  
19    orderly fashion with terraces and enough backfill of  
20    fine material on the surface to permit establishment  
21    of vegetation."

22                 Do you see that passage, sir?

23          A.     Yes, I do.

24          Q.     Is that consistent with what Molycorp had  
25    in mind as of 1972?

1           A.       Yes, sir.

2           Q.       In fact, I believe it is fair to say you  
3       took somewhat of a personal interest in reclamation  
4       in the early 1970s?

5           A.       Yes.

6           Q.       And one of the ideas that you explored was  
7       reclaiming the tailings, a portion of the tailings  
8       disposal area; is that right?

9           A.       The old original underground tailings,  
10      yes.

11          Q.       How about with respect to the offsite  
12      tailings area, did you do a test plot to see if you  
13      could cover it and get vegetation to grow there,  
14      too?

15          A.       You know, I didn't personally supervise  
16      that but yes, the company did, in fact, have  
17      significant vegetation growing on the tailings  
18      ponds.

19          Q.       And once operations were complete in the  
20      ponds, was that the company's plan to eventually  
21      cover it with clean material and revegetate?

22          A.       Yes.

23                   MR. AUGUSTINI: We looked at this exhibit  
24      earlier it is CX453, Mr. Hambrick.

25          Q.       (BY Mr. Augustini) Again for

1 reorientation purposes this is the map of the Questa  
2 Mine that indicates the patent boundaries that  
3 correspond to the changes in the land ownership over  
4 time, correct, Mr. Dewey?

5 A. Yes, sir.

6 MR. AUGUSTINI: If we could just show the  
7 next slide, please.

8 Q. (By Mr. Augustini) As the previous one we  
9 saw with respect to the open pit, here we have  
10 shaded Molycorp's landownership as of January 1974  
11 after the land exchange, does that look accurate to  
12 you, sir, the shaded, orange shaded area, again, is  
13 the Molycorp owned land?

14 A. I think it's accurate, yes, sir.

15 Q. We did ask a question about this earlier  
16 in terms of whether the waste piles were going to be  
17 disbursed across the entire area. Does this photo  
18 show, for example, down to the southern boundary and  
19 out west that there is no indication of waste piles  
20 in those areas, correct?

21 MR. HOPSON: Objection, ambiguous. I  
22 don't know what areas we are referring to,  
23 Your Honor. I can't understand the question because  
24 it is ambiguous.

25 THE COURT: Please restate your question.

1           Q        (By Mr. Augustini) Over here,  
2       approximately, do you see any indication of waste  
3       piles in that area, sir?

4           A.       No, I do not.

5           Q.       And after acquiring title to the  
6       2,000-plus acres in the exchange in January of 1974,  
7       Molycorp kept mining and kept dumping waste rock on  
8       its land, correct?

9           A.       Correct.

10          Q.       Generally the same manner it had before,  
11       correct?

12          A.       Correct.

13          Q.       I would like to turn to the DMEA loan,  
14       Mr. Dewey. We touched on that earlier. Molycorp  
15       applied for the DMEA loan ten years after your  
16       arrival in Questa, correct?

17          A.       No, ten years before my arrival.

18          Q.       Yes, you are correct.

19                   The DMEA was in 1957 and you arrived at  
20       Molycorp in 1967, correct?

21          A.       Correct.

22          Q.       And was it your understanding Molycorp  
23       voluntarily filed the loan application and received  
24       approximately \$200,000 in loan funds over a  
25       three-year period between 1957 and 1960?



1           A.     Yes, sir.

2           Q.     So the loan was roughly \$66,000 a year for  
3     three years?

4           A.     That is correct.

5           Q.     And Molycorp paid the full amount back to  
6     the Government, correct?

7           A.     Yes.

8           Q.     So ultimately Molycorp incurred  
9     100 percent of the exploration expense, correct?

10          A.     That is not exactly correct, sir. The  
11     USGS geologists were intimately involved in the  
12     program. They brought a lot of expertise to the DME  
13     program that was not charged, if you will, it was  
14     just topnotch geologists advising the program.

15          Q.     Sure. That was free, right?

16          A.     Yes, sir.

17          Q.     So in terms of the money expended,  
18     Molycorp paid 100 percent for the work, correct?

19          A.     Yes.

20          Q.     And all of the exploration work between  
21     1957 and 1960, the DMEA period, was underground; is  
22     that right?

23          A.     Yes.

24          Q.     And there was no waste rock generated from  
25     the underground exploration, correct? At least --

1           A.       Well, there were some small amounts of  
2     drifting and crosscutting, and that rock associated  
3     with that, of course had to come out of the tunnel,  
4     but it was copious amounts relative to what we are  
5     talking about today.

6           Q.       Sure.

7                    Just so I understand the last part, the  
8     waste generated by underground exploration was  
9     insignificant compared to the actual mining,  
10    correct?

11          A.       Correct.

12          Q.       Now, we discussed this morning that  
13    Molycorp old timers initially were hoping to find  
14    more of the super high grade or that they had been  
15    finding in the little veins in the mine, correct?

16          A.       That was the whole purpose of the  
17    exploration program, sir.

18          Q.       And at your deposition you testified that  
19    perhaps the Molycorp team at the time before your  
20    arrival should have been listening more to  
21    state-of-the-art geologists like Stewart Wallace and  
22    John Schilling.

23                    Do you remember that?

24          A.       Yes.

25          Q.       Are you familiar with John Schilling?

1           A.       I am familiar with his report.

2           Q.       Did he work for the New Mexico Bureau of  
3   **Mines?**

4           A.       Yes, sir.

5           Q.       And was Questa Mine one of his most  
6   **significant geological studies?**

7           A.       Yes.

8           Q.       Are you familiar with his 1956 publication  
9   **regarding the Questa Mine?**

10          A.       That is correct.

11          Q.       Do you understand Mr. Schilling spent  
12   **about 14 months living and working at the mine site**  
13   **in the '50s?**

14          A.       Correct.

15          Q.       And he was welcomed by the Molycorp team,  
16   **correct?**

17          A.       Yes, sir.

18          Q.       So there is no doubt that Molycorp was  
19   **aware of Mr. Schilling's geological study about the**  
20   **mine, correct?**

21          A.       Correct.

22          Q.       And since it was published in 1956, that  
23   **study would have been available to Molycorp prior to**  
24   **applying for the DMEA loan, correct?**

25          A.       Correct.

1           Q.     And is it your understanding that of  
2     Mr. Schilling's work that he did not think that  
3     pursuing high grade ore as had been done in the past  
4     was a good idea?

5           A.     Yes, I believe that is the conclusion he  
6     came to, yes.

7           Q.     And he did suggest that while nobody knows  
8     what the results would be, that exploration for low  
9     grade ore might be a good path for the Questa Mine?

10          A.     That is correct.

11          Q.     Now, Mr. Dewey, you also testified that  
12     Molycorp raised funds based on the award of the loan  
13     from DMEA; is that right?

14          A.     Yes, sir.

15                 MR. AUGUSTINI: Mr. Hambrick, please show  
16     CX63.

17          Q.     (By Mr. Augustini) Mr. Dewey, do you  
18     recognize this as the Molycorp stock offering that  
19     relates to the fundraising we just discussed?

20          A.     Yes, sir.

21          Q.     If we could turn to Page 10, please.

22                 MR. AUGUSTINI: If you could blow up the  
23     bottom paragraph.

24          Q.     (By Mr. Augustini) I will read it for the  
25     record, Mr. Dewey.

1            "In 1954 the company, following geological  
2       work on the property, undertook an exploration  
3       program aimed at locating extensions of the ore  
4       deposit. This work continued for two years and was  
5       evaluated by the company and consulting geologists."

6            THE COURT: What is your question,  
7       counsel?

8            MR. AUGUSTINI: Excuse me, Your Honor.

9            Q.        (By Mr. Augustini) If you would take a  
10       minute, Mr. Dewey does, that passage accurately  
11       reflect your understanding of the exploration work  
12       Molycorp was doing in the mid-'50s?

13           A.        Yes.

14           Q.        And the last sentence there, "One of the  
15       possibilities that Molycorp was considering at that  
16       time was a large deposit of molybdenum, which would  
17       be of commercial grade if mined and milled in  
18       sufficiently large quantities."

19                      Is that consistent with your  
20       understanding?

21           A.        Yes, that is.

22           Q.        And as for DMEA certifying the presence of  
23       an ore body, your testimony is that is what happened  
24       after the loan concluded, correct?

25           A.        Correct.

1           Q.       Regardless of what Molycorp found, under  
2       the loan agreement with the Government, there was no  
3       obligation to conduct any mining, correct?

4           A.       Correct.

5           Q.       So the mining was a business decision by  
6       the company, correct?

7           A.       Correct.

8           Q.       And Molycorp made that choice only after  
9       conducting much more exploration, ore body  
10      delineation, development work, correct?

11          A.       Yes.

12          Q.       And as we have discussed briefly this  
13      morning, Molycorp would not embark on a  
14      50-million-dollar investment to begin large scale  
15      mining without preparing a mine feasibility study,  
16      correct?

17          A.       Correct.

18          Q.       You testified the feasibility study was  
19      critical to justify investment and/or obtain  
20      financing for mine operations, right?

21          A.       Yes.

22          Q.       That is why Molycorp did so much work to  
23      explore and to develop the mine, to prove its  
24      feasibility, correct?

25          A.       It was critical work to defining the

1 limits of the ore research, yes.

2 Q. I would like to just briefly show you your  
3 written testimony. It is Page 28 or PDF Page 29  
4 from the Court filing.

5 At the top is your discussion of the  
6 feasibility study. If you take a moment to look at  
7 that, sir.

8 A. (Witness complied.)

9 Q. So if you are ready, the feasibility study  
10 reflected Molycorp's independent analysis of a  
11 number of factors, correct?

12 A. Correct.

13 Q. You list them here, but just to quickly go  
14 through them, those factors would include expected  
15 market place of molybdenum?

16 A. Yes.

17 Q. Capital required to construct a processing  
18 mill?

19 A. Yes.

20 Q. Infrastructure and equipment costs to do  
21 the mining?

22 A. Yes.

23 Q. Labor and material costs for mining?

24 A. Yes.

25 Q. Daily production rates at the mine?

1 A. Yes.

2 Q. Floor to waste stripping ratios?

3 A. Yes.

4 Q. Waste hauling routes?

5 A. Yes.

6 Q. Dump logistics and more, correct?

7 A. Say that again.

8 Q. I'm sorry, also the feasibility study, of  
9 course, would address waste dump logistics, correct?  
10 Where to place the waste rock that would be  
11 generated from mining?

12 A. You know, at that particular time not in  
13 intimate detail, but we subsequently, that was taken  
14 into consideration, yes.

15 Q. So now that you have a feasible project  
16 you have to have adequate space to accommodate your  
17 waste rock, right?

18 A. You could sit there and look at that space  
19 very easily, yes.

20 Q. Yes.

21 The United States did not participate in  
22 any of those different analyses, correct?

23 A. Correct.

24 Q. Mr. Dewey, I would like to turn briefly to  
25 the mill area again.



1 MR. AUGUSTINI: Mr. Hambrick, if you could  
2 put up Demonstrative 2.

3 Q. (By Mr. Augustini) We looked at this  
4 earlier. And you did identify the mill area down  
5 where I circled; is that correct, sir?

6 A. Yes, sir.

7 Q. Molycorp owned the land where the mill was  
8 situated, correct?

9 A. That is correct.

10 MR. AUGUSTINI: Now, I would like to show  
11 USX582.

12 Q. (By Mr. Augustini) Mr. Dewey, do you see  
13 that this is a memorandum titled, "Mill Operation  
14 Report June 1976" addressed to you?

15 A. Yes.

16 Q. And I think it is prepared, we can see it  
17 in a bit, but was Mr. Fillick (phonetic) the manager  
18 of the mill?

19 A. He was the mill superintendent.

20 Q. Did you receive an operation report like  
21 this for the mill every month in your job?

22 A. Yes.

23 MR. AUGUSTINI: Your Honor, move to admit  
24 USX582.

25 MR. HOPSON: No objection.

1 THE COURT: Without objection USX582 is  
2 admitted.

3 (Exhibit admitted, USX582.)

4 Q (By Mr. Augustini) This is an example of  
5 the detailed information that Molycorp management  
6 received regarding all aspects of the mill  
7 production, correct?

8 A. Correct.

9 Q. This is information that was routinely  
10 transmitted to you as your role as manager of the  
11 mine, correct?

12 A. Correct.

13 Q. In addition to the land, did Molycorp own  
14 all of the buildings and machinery in the mill area?

15 A. No. We were constantly struggling with  
16 finances and we generated some funds by selling all  
17 of our, not all of our equipment, but significant  
18 number of trucks to CIT. And so we leased the  
19 equipment back from, I don't remember now what the  
20 acronym stands for, but the lending company was  
21 called CIT. And other than that we owned  
22 everything.

23 Q. Okay. Just to break that down a bit,  
24 Molycorp owned the buildings in the mill complex; is  
25 that right?

1           A.       Yes.

2           Q.       And with regard to specific machinery, the  
3 ball grinders and whatnot, that is what was used to  
4 process the ore, correct?

5           A.       Yes, sir.

6           Q.       Was that Molycorp owned or --

7           A.       Molycorp owned it, yes.

8           Q.       And what was the other equipment that you  
9 mentioned that was leased from CIT then?

10          A.       Well, basically just a portion of the  
11 whole truck fleet, of the haulage fleet.

12          Q.       Okay. Then with respect to the mill, that  
13 was all company machinery and equipment, correct?

14          A.       Correct.

15          Q.       Molycorp also owned and operated the  
16 tailings pipeline that went from the mill down to  
17 the tailings area?

18          A.       Yes.

19          Q.       And if there was damage that resulted from  
20 the pipeline, one of the things Molycorp agreed was  
21 to indemnify the United States, correct?

22          A.       That terminology is in the lease  
23 agreement, yes, sir.

24          Q.       With respect to the tailings area, sir --

25                   MR. AUGUSTINI: If we can turn to CX370.

1           Q.        (By Mr. Augustini) Mr. Dewey, this is the  
2       site map that I believe you included in your direct  
3       testimony. Would you just take a moment and explain  
4       for the Court where the tailings area is in  
5       relationship to the mine?

6           A.        Okay. The mine obviously is labeled  
7       Molycorp mine site, surrounded by a yellow  
8       borderline. And if you look to the west of the mine  
9       cite, the next thing you see is the Questa, the town  
10      of Questa itself, and just to the left of that are  
11      the two tailings facilities. They are shaded in  
12      brown, outlined in brown.

13          Q.        Yes, thank you, sir.

14                    The legend on the right side of the map  
15       indicates that the yellow line is property boundary.

16                    Do you see that?

17          A.        Yes, I do.

18          Q.        So at least the yellow, yellow line  
19       surrounds the dark area that is shaded to reflect  
20       the Questa Mine, correct, that is Molycorp property?

21          A.        Correct.

22          Q.        Over at the tailings area, if we trace the  
23       yellow line sort of roughly like that, this map  
24       indicates that that is the Molycorp property that  
25       encompasses the tailings facility, correct?

1           A.       That's correct.

2           **Q.       And over its lifespan the mill generated**  
3           **100 percent of the tailings slurry that was**  
4           **transported to the tailings area, correct?**

5           A.       Correct.

6           **Q.       Molycorp directed, managed, monitored,**  
7           **controlled, all of the tailings disposal operations,**  
8           **correct?**

9           A.       Yes, sir.

10           THE COURT: You know, Counsel, I don't  
11           think there is any dispute about any of this.

12           MR. AUGUSTINI: Yes, Your Honor, I just  
13           want to make sure it is in the record. I'll move  
14           on.

15           THE COURT: It is in the record over and  
16           over and over again.

17           MR. AUGUSTINI: I will move on,  
18           Your Honor. Thank you.

19           Let's turn to USX368, please.

20           **Q.       (By Mr. Augustini) Mr. Dewey, are you**  
21           **familiar with the preventive maintenance and**  
22           **surveillance plan that Molycorp developed?**

23           A.       Yes.

24           MR. AUGUSTINI: I move to admit USX368,  
25           Your Honor?

1           MR. HOPSON: Your Honor, I am concerned  
2 about relevance on this one. We have a stipulation  
3 on the pipelines that we are not seeking any  
4 contribution on the pipeline issue, so I don't know  
5 what the relevance of this is.

6           THE COURT: That is why I said I thought  
7 it was established. I thought it was also  
8 established that the United States didn't fund  
9 anything except the DMEA, they didn't pay for  
10 anything, they just stored stuff on the unpatented  
11 lands.

12           MR. AUGUSTINI: Correct, Your Honor.

13           THE COURT: Why do we have to go through  
14 it over and over and over again?

15           MR. AUGUSTINI: I don't plan to. I don't  
16 plan to ask questions about the pipeline either.  
17 This document addresses the chronology of the  
18 tailings area, which has not been established.

19           THE COURT: It is irrelevant.

20           MR. AUGUSTINI: The western tailings area,  
21 Your Honor, is part of their claim against the  
22 United States.

23           THE COURT: All right. Is that correct?

24           MR. HOPSON: Yes, the tailings area is  
25 part of the claim but this is a document about

1 taking care of spills from the pipeline, which we  
2 are not seeking contribution on.

3 MR. AUGUSTINI: The Court has already  
4 ruled that it won't consider those and I don't have  
5 any questions about it, so it is moot.

6 THE COURT: Okay. Let's move along.

7 MR. AUGUSTINI: Let's turn to Page 19,  
8 Mr. Hambrick.

9 Q. (By Mr. Augustini) What I wanted to get  
10 to, Mr. Dewey, was Section 35, the western tailings  
11 area. Is Section 35 where Molycorp chose to  
12 construct the western tailings impoundment, sir?

13 A. I'm sorry, I was reading and I am not  
14 reading your lips. I'm sorry.

15 Q. Section 35, was that the area in which  
16 Molycorp constructed the western tailings  
17 impoundment?

18 A. Yes, sir.

19 Q. Do you see the date in the second  
20 sentence, 1971, was that the date that Molycorp  
21 began to build the first end in the western tailings  
22 area?

23 A. Yes, sir.

24 Q. So Molycorp did not begin disposing  
25 tailings in the western area until after that dam

1     **was completed in 1971, correct?**

2           A.     That is correct.

3           **Q.     And according to USX368 the dam, Dam 4,**  
4     **was that the one, main one in Section 35?**

5           A.     Repeat it, please.

6           **Q.     Sorry.**

7                   **Was Dam 4 the main tailings dam in**  
8     **Section 35, the western area?**

9           A.     Yes, sir.

10          **Q.     Was that about 118 feet tall,**  
11     **approximately a thousand feet long and 1,300 feet**  
12     **wide?**

13          A.     Yeah, to the best of my recollection, that  
14     is correct.

15                   THE COURT: It is just what it says there.

16                   MR. AUGUSTINI: Yes, Your Honor.

17                   THE COURT: Counsel, you are going to have  
18     to move this. You have taken all morning and all  
19     afternoon going over stuff that was either not  
20     controverted or that we know is not disputed.

21                   MR. AUGUSTINI: Okay, I will move on,  
22     Your Honor.

23          **Q     (By Mr. Augustini) Are you aware that**  
24     **perimeter ditches surrounded the tailings area?**

25          A.     Yes, sir.



1           **Q.       What was the purpose of those, sir?**

2           A.       To control meteoric waters, keep them from  
3       encroaching the tailings areas.

4           **Q.       And was that natural runoff that would**  
5       **come down from the mountain?**

6           A.       Yes.

7           **Q.       Was the purpose of those to dispose of**  
8       **tailings waste?**

9           A.       No.

10          **Q.       Molycorp never intended for contaminated**  
11       **water to go from the tailings ponds to the Red**  
12       **River, correct?**

13          A.       All the water went, eventually all the  
14       overflow eventually went to the Red River from the  
15       very beginning.

16          **Q.       It did flow to the Red River, sir, but it**  
17       **was not Molycorp's intention that there would be any**  
18       **contamination in the outflow from the impoundments**  
19       **down to the river; is that correct?**

20          A.       That's correct.

21          **Q.       And can you just briefly describe for the**  
22       **Court, please, the canting process within the**  
23       **impoundments?**

24          A.       Yes. The tailings are thickened at the  
25       mill to consistency of about 60 percent solids,

1 40 percent water, pump, in this case, that Dam  
2 Number 35, 10 miles to the pond.

3 A course fraction, the heavy, all of the  
4 sediments in the solution settles out into the pond  
5 and over time the clear water is on the surface and  
6 that is decanted off in a series of spillways  
7 directed to an iron exchange plant where the water  
8 is treated to remove copious amounts of rubidium  
9 that back in, I think, 1985 the EPA decided was too  
10 much and then it is discharged into the Red River  
11 immediately above the fish hatchery.

12 **Q. Right. And so the basic concept of the**  
13 **decanting would be for the tailing solids to sit**  
14 **right there and collect at the bottom of the**  
15 **impoundment, correct?**

16 A. Correct.

17 **Q. And then the clear or the clean water**  
18 **would move on down, after treatment would move on**  
19 **down towards the Red River, right?**

20 A. Correct.

21 MR. AUGUSTINI: Mr. Hambrick, please  
22 display USX478.

23 **Q. (By Mr. Augustini) Mr. Dewey, do you**  
24 **recognize your initials there on this memorandum?**

25 A. Well, yes, I do.

1           **Q.       The date is May 10, 1991?**

2           A.       Correct.

3           **Q.       The title is, "Process Residues and**  
4 **Waste," correct?**

5           A.       Correct.

6           **Q.       Could you please describe what the purpose**  
7 **of this memo was?**

8           A.       At this point in time we had decided to  
9 put Molycorp up for sale and we had created a data  
10 room and we wanted to put everything in the data  
11 room that pertained to Molycorp's operation.

12                   And this memo was prepared to go to  
13 Mr. Dikers who was in charge of the data room at the  
14 time.

15           **Q.       So was this in the nature of due diligence**  
16 **process for potential acquisition then?**

17           A.       Yeah, for something of who might want to  
18 look at acquiring Molycorp could look at, yes.

19                   MR. AUGUSTINI: Let's turn to USX477,  
20 please.

21           **Q.       (By Mr. Augustini) Do you recognize this**  
22 **memo, sir?**

23           A.       Yes, I do.

24           **Q.       And this is Mr. Shoemaker's response to**  
25 **the exhibit that we previously reviewed, correct?**

1           A.       Yes.

2           Q.       And he goes through and identifies sources  
3 of waste that are located at the Questa Mine,  
4 correct?

5           A.       Yes, sir.

6           Q.       Have you had a chance to review this  
7 memorandum prior to testifying to today?

8           A.       I have.

9           Q.       Is there anything in the memo  
10 Mr. Shoemaker wrote that is incorrect?

11          A.       No.

12                   MR. AUGUSTINI: No further questions,  
13 Your Honor.

14                   THE COURT: Thank you. You may redirect.

15                   MR. HOPSON: Your Honor, good afternoon.

16                               REDIRECT-EXAMINATION

17           BY MR. HOPSON:

18           Q.       Good afternoon, Mr. Dewey. Let's start by  
19 looking again at Chevron Exhibit 245, parts of which  
20 were reviewed during your cross-examination. It is  
21 on the screen in front of you, and this is the  
22 Miller memo. Now you knew Mr. Miller, right?

23          A.       I'm sorry?

24          Q.       Did you know Mr. Miller?

25          A.       Oh, very well, yes, sir.

1           **Q.       Okay. Did Mr. Miller prefer the land**  
2           **exchange or did he prefer the valley fill plan?**

3           A.       He preferred the valley fill plan.

4           **Q.       Why did he prefer the valley fill plan?**

5           A.       I believe this memo, can I look at the  
6           whole memo for a minute? I think this memo  
7           described why.

8                   The second paragraph he outlines his  
9           concern. "Future generations will no doubt be faced  
10          with tremendous problem regarding the Red River  
11          canyon dumps. First the material is already  
12          standing at the angle of repose because that was the  
13          angle of the hillside.

14                   "Second the material is easily altered by  
15          weathering and it should not take many summers for  
16          the channel to form under dump slopes and create  
17          possibility of catastrophic mud slides.

18                   "The idea of putting a highway in the  
19          river through a tunnel has already been rejected.  
20          Now is not the time. Emotions are running high  
21          against strip mines from the standpoint of ecology,  
22          a tunnel would be a more practical solution.

23                   "First of all, by dumping straight across  
24          the canyon would have only the dump faces to contend  
25          with. Secondly, we could terrace or flatten the

1 dump faces and stand a much better chance of  
2 controlling erosion. A flatter slope would be more  
3 amenable to trees and ground cover."

4 John and the rest of us never gave up on  
5 the idea that this was where it needed to go.

6 **Q. So if you went back to December 10, 1970**  
7 **and you personally could choose between valley fill**  
8 **plan and the land exchange, what would you choose?**

9 A. Valley fill plan.

10 **Q. Why did you accept the land exchange that**  
11 **was proposed by the Forest Service?**

12 A. During the meeting when they discussed the  
13 use of mill site claims, one of the Government  
14 officials stated that we are not sure that waste  
15 disposal on mill site claims is an allowable use.  
16 And if you choose to do that, we would probably --  
17 we would force a friendly, I think they used the  
18 word friendly, validity contest.

19 And, you know, Judge Watson, I'm sorry,  
20 Jack Watson knew enough about where things are going  
21 that a validity contest in all probability would be  
22 several years and we needed to have a place to go  
23 the next day.

24 **Q. When you talk about the claims in the**  
25 **valley, are those, those fan-shaped claims you were**

1     **talking about earlier today?**

2           A.     Yes, sir.

3           **Q.     Did you view the Forest Service discussion**  
4     **of a validity contest as a threat?**

5           A.     Very definitely.

6           **Q.     And finally on this subject, this morning**  
7     **when you were answering questions you said the land**  
8     **exchange is why we are here.**

9                   **What did you mean by that?**

10          A.     Well, if we would have had the ability to  
11     go across the highway, probably only -- I can't be  
12     specific, but I would say 25 percent of the waste  
13     that is on that hillside now would be what was  
14     there, maybe not in the hole with -- but it would be  
15     just enough, just enough to get across the tunnel  
16     and a culvert put the highway on a culvert, the  
17     tunnel, and get to the other side.

18                 We had to spend our full time figuring out  
19     how to stack close to 400 million tons on that piece  
20     of land exchange and that is the reason for these  
21     extensive dump plans going on continually. And if  
22     we were able to just go straight across,  
23     particularly, you know, I get an opportunity  
24     sometime around 1970s to go and visit this other  
25     mine in Arizona, Twin Buttes, where they had a

1 similar rock failure. And in the process, I was  
2 shown a system they put in, in pit crusher with a  
3 conveyer system limiting the truck haulage extremely  
4 at a third the cost of truck haulage.

5 There is no question in my mind that if we  
6 were hauling trucks across valley full, after what I  
7 saw overnight we would have had a conveyer going  
8 across that valley fill.

9 **Q. That raises something. Was the valley**  
10 **fill a longer haul than the land exchange lands?**

11 A. No. Well, yes and no. In some  
12 configurations of those dumps they had to almost do  
13 S-shaped turns in order to try to stage the volume  
14 of material that was going in level by level in  
15 order to try to make it all fit.

16 **Q. Okay.**

17 MR. HOPSON: Ms. Hutchman, can we see just  
18 the front page of Chevron 281, which is the  
19 Environmental Impact Statement.

20 **Q. (By Mr. Hopson) Mr. Dewey, when you were**  
21 **testifying about the environmental impact statement**  
22 **you said it was always Molycorp's intent to continue**  
23 **mining; is that correct?**

24 A. Correct.

25 **Q. But if you didn't get land through the**



1     **land exchange or through the valley fill, would you**  
2     **have been able to continue mining?**

3           A.     Definitely not.

4           Q.     You talked about in the environmental  
5     **impact statement terracing and restoring the**  
6     **vegetation. Is it possible to do that on those**  
7     **front rock dumps that go along the highway and the**  
8     **Red River?**

9           A.     Yes, we had test plots. I am sure Chevron  
10    continues to have test plots long after I left but  
11    we were able to grow vegetation, yes, sir.

12          Q.     Okay. We looked earlier today, you were  
13    **asked questions about U.S. Exhibit 191, which was an**  
14    **article about by Jack Dolman about long hold**  
15    **drilling.**

16                   Do you remember that?

17          A.     Yes, I do.

18          Q.     Whose idea was it to do long hole or  
19    **diamond drilling during the DMEA exploration**  
20    **program?**

21          A.     The USGS or the Government geologists  
22    literally insisted if we were going to get an  
23    agreement, at least as I read all of the back and  
24    forth, if we were going to get this application  
25    approved, we had to, Molycorp, I said we, Molycorp

1 had to accept this proposal to do some diamond  
2 drilling to look for what Schilling described as a  
3 potential low grade resource.

4 There is no question that Carman Greslin  
5 and all of those people who were involved in that  
6 50-ton-a-day mule horse and buggy operation were  
7 interested in that, but in order to get that  
8 contract, they agreed to it.

9 **Q. And just before the negotiations with the**  
10 **DMEA in 1954 to 1956, was Molycorp looking for high**  
11 **grade ore or low grade ore?**

12 A. Only high grade.

13 **Q. Was Molycorp reluctant to look for low**  
14 **grade ore?**

15 A. They had no use for it.

16 **Q. Let me ask you this. How important was**  
17 **the expertise of the U.S. Bureau of Mines and the**  
18 **geological survey in the course of the DMEA program?**

19 A. You know, very important. If you read  
20 through Carman's reports, he consistently  
21 compliments the expertise of the geologists that the  
22 Government had.

23 And, you know, people prior to the DMEA  
24 program, the only expertise they had were hiring  
25 people like Schilling or when they would visit the

1 property. So they were there, you know, to direct  
2 the program as it was underway, they reviewed what  
3 was going on and made some suggestions and Carman  
4 refers to that as being very helpful.

5 **Q. Okay. You mentioned Mr. Schilling.**

6 MR. HOPSON: If we could, Ms. Hutchman,  
7 can we call up Chevron 43 and turn to Page 92.

8 **Q. (By Mr. Hopson) Now, do you remember**  
9 **being asked about Schilling's comments and**  
10 **observations about low grade ore?**

11 A. Yes, I do.

12 **Q. Let's look at what Mr. Schilling's**  
13 **conclusions were about low grade ore.**

14 "In summary," he says, "large tonnages of  
15 low grade molybdenum ore occur but no deposits are  
16 not large enough to be mined by block caving or open  
17 pit methods which would be necessary for profitable  
18 operation."

19 **Was that the understanding of Molycorp and**  
20 **everybody else prior to the DMEA program?**

21 A. Yes, sir. Not everybody else because if  
22 you look back at some of the correspondence that was  
23 taking place between the Government individuals,  
24 they felt that the exploration for high grade was  
25 not a valid reason to justify a DMEA contract. They

1 needed to have a better target.

2 And this to them, based upon this  
3 Schilling report, was the better target and why they  
4 were insisting on the diamond drilling program to  
5 look for this low grade ore resource.

6 **Q. And when you say, Mr. Dewey, they were**  
7 **insisting, are you referring to the DMEA and the**  
8 **geological survey and the Bureau of Mines and the**  
9 **other agencies of the United States?**

10 A. Yes. If you look back through the files  
11 you will see comments that, you know, we don't  
12 believe that Molycorp management was interested or  
13 will agree to this. Ultimately they had to do  
14 something, and they agreed to it.

15 **Q. I want to change gears here for a minute.**  
16 **Mr. Augustini asked you about, a number of questions**  
17 **about Kennecott. And I believe you testified that**  
18 **there was an agreement to enter a partnership with**  
19 **Kennecott; is that correct?**

20 A. Correct.

21 **Q. Was that agreement finalized or**  
22 **consummated?**

23 A. No, it was not.

24 **Q. Did you negotiate to buy Kennecott out of**  
25 **that agreement?**

1           A.       Yes, I did.

2           **Q.       Why?**

3           A.       I was against the agreement from the very  
4 beginning. I felt that we had worked all of these  
5 years on this property, we had finally discovered a  
6 resource that looked like it had a chance to be  
7 profitable, and for a lousy \$5 million, it turned  
8 out to be 6 million, we were going to give Kennecott  
9 a chance to take 60 percent.

10                   We had accumulated thousands of acres of  
11 water rights which were precious, timely, patented  
12 ground, 20,000 acres of patented ground by that  
13 time, and to give it all away for what initially was  
14 \$5 million to me never made sense.

15           **Q.       Well, let me just stop you there,**  
16 **Mr. Dewey. While you were exploring that**  
17 **partnership, I think it was pointed out that**  
18 **Kennecott spent about 6 million?**

19           A.       Correct.

20           **Q.       What did they spend that on?**

21           A.       Definitive drilling of -- we had prior to  
22 getting Kennecott involved, we had found enough  
23 drilling to make an estimate of this resource, but  
24 we had no money, and so we -- I was told to find a  
25 joint venture.

1           **Q.       Did Kennecott spend that money to benefit**  
2           **Molycorp or to protect its investment?**

3           A.       Well, I don't believe Kennecott had any  
4           investment in Molycorp at that time. I think  
5           sometime, sometime after that -- after their study  
6           in 1961, I think they sold their investment. I  
7           don't remember seeing any discussion about Kennecott  
8           continuing in the ownership in any kind of Molycorp.

9           **Q.       Why did they spend the \$6 million figuring**  
10          **out what was there?**

11          A.       Well, you know, we had the low cadmium,  
12          60 million tons sitting behind the town of Questa.

13                   Moly prices for the first time ever in my  
14          career had gone from \$3 a pound to \$25 a pound and  
15          ultimately ended up at \$40 a pound. And typical of  
16          what happens in this commodity business, everybody  
17          and their brother jumps on the opportunity to, you  
18          know, 127 oil a day, I mean, we all can see what  
19          happens to the profits to the oil company.

20                   So Kennecott was very interested in  
21          participating in this resource that they knew a lot  
22          about because they had been in and out of it in 1961  
23          and prior. It was a very easy decision for them to  
24          make.

25                   It was easy for our management to make it

1 at the time because they had lost so much on the  
2 open pit portion that they were insistent that if we  
3 were going to do anything in the future we needed to  
4 have a partner.

5 Q. Was Kennecott ever an owner of the Questa  
6 site?

7 A. No, sir.

8 Q. We talked a little bit on your direct, you  
9 were asked about the valley fill plan and  
10 Mr. Torgerson's role in helping to develop that.

11 Do you recall that testimony?

12 A. Yes, I do.

13 Q. Who was Mr. Torgerson?

14 A. He was, at the time a senior engineer in  
15 the engineering department and he eventually became  
16 chief engineer.

17 Q. Did he develop written proposals and  
18 drawings about valley fill plan?

19 A. Yes, yes, sir.

20 Q. Do you recall seeing them?

21 A. I recall seeing the drawings of the  
22 culverts and the tunnel concept. I didn't see  
23 anything other than -- that I can remember today,  
24 other than those.

25 Q. Okay. And as we have already established,

1     **Molycorp continued to be interested in the valley**  
2     **fill program even as it was pursuing the land**  
3     **exchange, right?**

4           A.     Yes.

5           Q.     You were asked a number of things today  
6     over and over again, things that Molycorp did like  
7     buying equipment and hiring employees. I just want  
8     to ask you a couple of things the U.S. did.

9                     Did the U.S. take discretionary actions to  
10    provide special use permits at the Questa site?

11           A.     You know, very definitely in the beginning  
12    the tailings lines had to traverse 6 or 7 miles of  
13    Forest Service land to make it to the tailings pond  
14    area.

15                     Section 35 land was owned by the BLM, at  
16    the time, and practically overnight they facilitated  
17    a public auction to enable us to acquire that  
18    parcel.

19                     There were special use permits for  
20    decanting water from the tailings dam to the river.  
21    Anything we did required some kind of a, you know,  
22    approval or permit.

23                     And they were anxious to provide us with  
24    those.

25           Q.     At the time did you ever refer to the



1     **United States Government as your landlord?**

2           A.     Yes, sir.

3           **Q.     And why did you refer to them as your**  
4     **landlord?**

5           A.     Because is precisely what they were. We  
6     were operating on U.S. Forest Service land and, you  
7     know, one of our -- one of our concerns mentioned  
8     the time it took between the time the land exchange  
9     was agreed to in 1969 and it finally approved in  
10    '74.

11                   At any point in time somebody could have  
12    decided they didn't like what we were doing, and  
13    that would be the end of it. So we really wanted  
14    that consummated and so that is why, we were, they  
15    were in control of anything we did.

16           **Q.     Did you work to maintain a good working**  
17     **relationship with the Forest Service and other**  
18     **agencies in the United States Government?**

19           A.     Yes, I did. I had a very close  
20    relationship with John Hart, the Forester. Whenever  
21    one of our employee's wife died prematurely and she  
22    happened to be a ski instructor in a little small  
23    ski area across from an old Forest Service graveyard  
24    that hadn't been used in 75 years or so and her  
25    husband wanted her buried there. And I went and

1 talked to John and told him what the situation was  
2 and he gave me permission to take a grave and bury  
3 her there.

4 About two years later her husband left us  
5 and went off to Idaho and worked for SIMCO Company  
6 and drowned in a cold lake and his family whose  
7 brothers worked at the mine said we got to plant Al  
8 next to Judy and I had to go back to John.

9 And as far as the fish hatchery was  
10 concerned, I had a relationship with everybody from  
11 Led Gordon who was the head of the whole department  
12 of Fisheries to Roy Pope, Pope named a lake after  
13 Roy when we first started Dam Number 35 and they  
14 opened up the gates to let some recant water out, it  
15 created some turbidity in the river because that  
16 wash hadn't been used since a rainstorm several  
17 months prior. And Roy came up, gave me a lot of  
18 static and within about two hours we had a dam  
19 created, temporary dam to control it. We had to  
20 stop it immediately, and I guess tongue in cheek,  
21 but I painted a sign that said Pope Lake and stuck  
22 it in the ground and got Roy to come back up and  
23 show him what we had done.

24 **Q. Let me focus you back on the Questa site**  
25 **for a minute. Did the United States take other**

1       **discretionary acts such as providing rights of way?**

2           A.       Yes.

3           **Q.       Did the United States provide lands,**  
4       **including lands for disposal of waste rock through**  
5       **land sales and land exchanges?**

6           A.       Yes, sir.

7           **Q.       Did the United States Government support**  
8       **and promote the open pit mining at Questa?**

9           A.       Very definitely. You know, there are  
10       letters in the files from Department of Interior  
11       talking about how poor Northern New Mexico was and  
12       the Forestry at that time back in those years were  
13       mobile use agencies.

14                   And the head Forester was advising the  
15       local Forester that we needed to do everything that  
16       we can to help Molycorp, help this mine to help the  
17       people of Northern New Mexico.

18           **Q.       Back to your personal relationship with**  
19       **the Questa Mine site. When you arrived at the site**  
20       **in 1969 --**

21           A.       '67.

22           **Q.       -- sorry, 1967. When you arrived at the**  
23       **site in '67 did the United States own part of the**  
24       **land at the Questa Mine site?**

25           A.       Yes.

1           Q.     Did the United States own land on which  
2 waste rock was deposited at the time you arrived at  
3 the Questa Mine site?

4           A.     Yes.

5           Q.     Was the United States aware that its land  
6 was being used for waste rock disposal?

7           A.     Yes, it was.

8           Q.     To your knowledge, all your decades with  
9 the company, did the United States ever object to  
10 the manner in which Molycorp disposed of waste rock?

11          A.     They expressed concerns about the  
12 possibility of a dump encroaching the highway and in  
13 several instances we had already established some  
14 catchment basins, if you will, or berms that we  
15 should continue that in a new area we were dumping  
16 in.

17          Q.     That was the very same land that the  
18 United States gave you in the land exchange, right?

19          A.     They were in the process of giving it to  
20 us. They still owned and controlled it then.

21          Q.     There were questions asked about stock  
22 offerings that Molycorp did, including one in 1957.  
23 Do you recall that?

24          A.     Yes, I do.

25          Q.     And in the wake of the DMEA program and

1     **the discovery of the low grade ore body, did**  
2     **Molycorp go out and raise money?**

3           A.     Yes, they did.

4           **Q.     Did they do it through securities**  
5     **offerings?**

6           A.     Yes.

7           **Q.     Did they do it through bank loans?**

8           A.     I think there was a small bank loan then  
9     was primarily the security offering or something  
10    approaching \$13 million or so.

11          **Q.     In that securities offering, did they**  
12    **attach any documents referencing the DMEA?**

13          A.     Yes, they attached the contract itself and  
14    I referred to the originals.

15          **Q.     So the DMEA contract was attached to the**  
16    **prospectus of raising money, right?**

17          A.     Yes.

18          **Q.     And did they use the DMEA certification of**  
19    **the discovery in connection with obtaining bank**  
20    **financing and other financing?**

21          A.     Yes, very definitely.

22          **Q.     I want to look at one last document,**  
23    **Mr. Dewey.**

24                 MR. HOPSON: Ms. Hutchman, can we call up  
25    Chevron 46 at Page 6, please.

1           Q.        (By Mr. Hopson) You know, Mr. Dewey, that  
2       this is the application, the original application  
3       that Molycorp made to obtain DMEA funding and  
4       assistance, correct?

5           A.       Yes, sir.

6           Q.       Will you read for us what they said about  
7       their current plans at the time they were asking the  
8       DMEA for help?

9           A.       "As stated, no production is forthcoming  
10      from any part of the mine and no ore reserve are  
11      considered available. Also, no other exploration  
12      work is, for the present, planned other than that  
13      covered by this application."

14          Q.       You have spent many years of your life in  
15      the mining industry and became a senior executive at  
16      Molycorp. Do you believe a company that has no  
17      production and no reserves would have obtained  
18      financing but for the DMEA loan?

19          A.       No, I do not.

20                 MR. HOPSON: No further questions,  
21      Your Honor.

22                 THE COURT: Thank you. I have one  
23      question.

24                 Mr. Dewey, did your company store waste,  
25      put waste products on unpatented mining claims?

1 THE WITNESS: Yes, sir.

2 THE COURT: And how many were there, if  
3 you can approximate.

4 THE WITNESS: Well, during this whole  
5 period of the land exchange nearly all of that land  
6 was unpatented mining claims, which we withdrew the  
7 claims in order to facilitate the land exchange.  
8 That was a requirement.

9 You know, prior to that there was  
10 definitely places where waste disposal was going on  
11 unpatented ground.

12 THE COURT: And how about on unimproved  
13 mill sites?

14 THE WITNESS: Unimproved mill sites. Yes,  
15 some of the original unpatented mill sites, yes. On  
16 Capulin Canyon we used mill sites. Capulin Canyon  
17 is large canyon that faces Questa. It goes directly  
18 south, so the top of the mountain when we had to get  
19 up, the top of the mountain was stripped off and put  
20 into Kathleen Canyon. And that is the first place  
21 that we used this mill site claims that were not  
22 patented.

23 THE COURT: All right. Thank you. You  
24 may step down.

25 (Whereupon the witness was excused.)

1 THE COURT: Please call your next witness.

2 MR. TODD: Your Honor, Chevron calls  
3 Dr. Neal Rigby.

4 THE COURT: I'm sorry, say who?

5 MR. HOPSON: Neal Rigby, Dr. Rigby.

6 (Whereupon the witness was sworn.)

7 THE DEPUTY CLERK: Please be seated and  
8 state and spell your name for the record.

9 THE WITNESS: My name is Neal Rigby,  
10 N-E-A-L, R-I-G-B-Y.

11 MR. TODD: Dr. Rigby, have you prepared  
12 written testimony in this matter?

13 THE WITNESS: Yes, I have.

14 MR. TODD: Before it is offered, is there  
15 any testimony that you would like to update?

16 THE WITNESS: Two items on my direct  
17 testimony. One is on Page 7 where my original rate  
18 was \$560 an hour. That was increased on January 1st  
19 to \$645 an hour.

20 And there is another change, which is on  
21 Page 37, which is a typo, where I refer or what is  
22 written is northwest zone and actually, in fact, it  
23 should be northeast zone.

24 Other than that, nothing.

25 MR. TODD: Your Honor, with those two



1 changes, we submit Dr. Rigby's testimony.

2 THE COURT: Very good.

3 (Dr. Neal Rigby's direct testimony was  
4 prefiled and admitted.)

5 THE COURT: You may cross-examine.

6 MS. KIMBALL: Thank you, Your Honor.

7 CROSS-EXAMINATION

8 BY MS. KIMBALL:

9 Q. Good afternoon, Dr. Rigby.

10 A. Good afternoon.

11 Q. You are employed by SRK Consulting,  
12 correct?

13 A. Correct.

14 Q. SRK provides full service consulting to  
15 companies operating mines, correct?

16 A. Correct.

17 Q. SRK helps companies develop and maintain  
18 mines, is that right?

19 A. Among other things, yes.

20 Q. They help companies plan and conduct  
21 exploration for mines?

22 A. Yes.

23 Q. They help mining companies develop mines?

24 A. Yes.

25 Q. And they help mining companies find

1     **financing for their mines?**

2           A.     Indeed, yes.

3           Q.     Is it fair to say that mining companies  
4     make up a large share of the clientele of SRK  
5     Consulting?

6           A.     A large share, yes.

7           Q.     Aside from a couple of years when you were  
8     employed directly by a mine, you have worked for SRK  
9     for virtually your entire career; is that correct?

10          A.     44 years.

11          Q.     And you were the group chairman of SRK  
12     Global from 1995 through 2010; is that right?

13          A.     Yes.

14          Q.     And that position oversaw SRK's work in  
15     North America; is that accurate?

16          A.     Globally.

17          Q.     Okay. Did that include --

18          A.     It includes North America, yes.

19          Q.     Thank you.

20                 And Chevron and its predecessor Molycorp  
21     hired SRK Consulting to consult on the Questa Mine  
22     while you were the chair over North America,  
23     correct?

24          A.     Over a period of time, yes.

25          Q.     Okay. And what period of time was that?

1           A.       I am not entirely certain, but I would say  
2       probably SRK's involvement in the maybe '80s and  
3       '90s, maybe beyond that.

4           **Q.       Up into the 2000s?**

5           A.       Yes.

6           **Q.       Okay. And is SRK Consulting current doing**  
7       **any work for Chevron Mining aside from your expert**  
8       **services?**

9           A.       Not that I am aware of.

10          **Q.       Okay. You mentioned in your testimony and**  
11       **I am going to turn to your opinions, I apologize.**

12                   Now you mentioned in your testimony that  
13       there are certain places where acid rock drainage  
14       occurs naturally near the Questa Mine, correct?

15          A.       Yes.

16          **Q.       This case is solely about responsibility**  
17       **for the mine waste that Chevron created at its mine,**  
18       **correct?**

19          A.       Correct, but the receiving environment in  
20       totality is very important.

21          **Q.       But they are not being asked to clean up**  
22       **natural formations, are they? They are being asked**  
23       **to clean up the waste rock that they created?**

24          A.       I believe so, yes.

25          **Q.       And Chevron extracted more than**

1     300 million tons of waste rock from the open pit,  
2     correct?

3           A.     Yes.

4           Q.     And that open pit mine was on land that  
5     Chevron has owned since the 1920s, isn't that right?

6           A.     The mine itself, yes.

7           Q.     The open pit mine?

8           A.     Yes.

9           Q.     And Chevron owned that land for decades  
10    before they even contemplated building the open pit,  
11    right?

12          A.     Yes.

13          Q.     As of 1974 Chevron owned virtually the  
14    entire area of the mine, isn't that right?

15          A.     I believe so.

16          Q.     And Chevron dumped over 300 million tons  
17    of acid waste rock around the pit, around the open  
18    pit on land that it has owned for decades, right?

19          A.     No, I disagree with that.

20          Q.     They have not owned that land for decades?

21          A.     No, no, no, I disagree that it is  
22    300 million tons of acid waste rock. Some is acid  
23    generating and some isn't.

24          Q.     Okay. Would it be fair to say they have  
25    dumped 300 million tons of waste rock that contains

1 acid waste rock around the open pit on land that  
2 they have owned since the '70s?

3 A. That contains a degree of acid waste rock,  
4 yes.

5 Q. And the 300 million tons of waste rock on  
6 Chevron's land generates acid mine drainage that is  
7 separate from and different drainage than the  
8 natural acid rock drainage, right?

9 A. Can you differentiate, please, natural  
10 versus?

11 Q. There is drainage that is occurring from  
12 the waste rock that Chevron created?

13 A. Yes.

14 Q. That is different than that is -- it is  
15 not the exact same waste rock that is coming from  
16 the natural formation, right? There is waste rock  
17 coming off of Chevron's waste rock piles?

18 A. In addition to the drainage, the acid rock  
19 drainage coming from the hydrothermal alteration  
20 scars, yes.

21 Q. Thank you.

22 Chevron alone extracted the rock from the  
23 open pit mine, correct?

24 A. Correct.

25 Q. The United States did not extract any rock

1 from the open pit mine?

2 A. No.

3 Q. And Chevron alone arranged for the  
4 transportation of the waste rock from the open pit  
5 to the dump sites?

6 A. Yes.

7 Q. The United States did not make any  
8 decisions regarding how the waste rock was  
9 transported to the dump sites?

10 A. No.

11 Q. And Chevron alone actually transported  
12 that waste rock, isn't that right?

13 A. Yes.

14 Q. And Chevron owned the vast majority of the  
15 dump sites by 1974, isn't that right?

16 A. Was that up to or including the date of  
17 the land exchange, which was in 1974.

18 Q. As of the land exchange they owned  
19 virtually all of the land that the waste rock is on?

20 A. Yes.

21 Q. Okay. And because Chevron owned and  
22 operated the mine, the EPA has now required Chevron  
23 to take certain steps to prevent its mine waste from  
24 contaminating the Red River, isn't that right?

25 A. I believe so.

1           Q.       There is no question that Chevron's mining  
2       contaminated this site and impacted the Red River,  
3       right?

4           A.       To a degree, yes.

5           Q.       There is no question that the  
6       United States did not conduct any mining whatsoever  
7       on the mine site, correct?

8           A.       Correct.

9           Q.       You visited the site in 2018 and took  
10      photos of the open pit, right?

11          A.       I visited the site, twice.

12          Q.       Okay.

13          A.       2018 and 2019.

14          Q.       Okay. Did you take photographs while you  
15      were there?

16          A.       Yes.

17                 MS. KIMBALL: Mr. Hambrick, could you pull  
18      up USX596.

19          Q.       (By Ms. Kimball) Dr. Rigby, is this a  
20      photograph that you took of acid rock drainage in  
21      the open pit of the Questa Mine?

22          A.       I believe so, yes.

23                 MS. KIMBALL: Your Honor, I would like to  
24      move for admission of USX596 into evidence.

25                 MR. TODD: No objection.

1 (Exhibit admitted, USX596.)

2 Q (By Ms. Kimball) Dr. Rigby, approximately  
3 how big is this pool of acid mine drainage?

4 A. What do you mean how big?

5 Q. Do you have any concept of the --

6 A. Gallons or, no, I have no idea.

7 Q. How about the footage?

8 A. No, not really.

9 Q. Can you say like in a ballpark is it more  
10 than 100 feet across, is it more than 5 feet across?

11 A. No, I think you are probably looking at  
12 maybe 100 feet by 200 feet or thereabouts.

13 Q. Thank you.

14 THE COURT: I'm sorry, what was your  
15 answer to that question.

16 THE WITNESS: 100 feet by 200 feet.

17 THE COURT: I'm sorry, say it again.

18 THE WITNESS: 100 feet by 200 feet.

19 THE COURT: Okay. Thank you.

20 Q (By Ms. Kimball) And a similar pool sits in  
21 the subsidence area of the mine, correct, right on  
22 top of the second underground mine?

23 A. Could you repeat that, I'm sorry, I missed  
24 it.

25 Q. A similar pool of acid rock drainage sits



1     **in the subsidence area of the mine right on top of**  
2     **the second underground mine?**

3           A.     Yes. But a lot of that would drain  
4     through due to the subsidence.

5           MS. KIMBALL: Mr. Hambrick, could you  
6     please pull up -- did I move for admission of  
7     USX596?

8           MR. TODD: Yes.

9           MS. KIMBALL: Thank you. Mr. Hambrick,  
10    could you please pull up USDEM0004. Could you zoom  
11    in on the subsidence area.

12          Q.     **(By Ms. Kimball) It is a little hard to**  
13    **see because of the wording is right over it, but can**  
14    **you see the little yellow shading behind the**  
15    **subsidence?**

16          A.     Yes, I can.

17          Q.     **That is the acid rock drainage that is in**  
18    **the subsidence area?**

19          A.     Just above the subsidence area, yes.

20          Q.     **And do you have any idea of the general**  
21    **size of those pools?**

22          A.     Probably not dissimilar to the one in the  
23    pit, maybe slightly smaller.

24          Q.     **Okay. And that acid rock drainage is**  
25    **filtering down through the underground mine works of**

1     **Chevron's second underground mine, correct?**

2           A.     Yes, where it is collected today, where it  
3     is collected and pumped brought back for treatment  
4     before discharge to the Red River.

5           **Q.     You said today. Did there come a time**  
6     **when that changed?**

7           A.     I believe so, but I don't know the date.

8           **Q.     Because of Chevron's mining impacts, the**  
9     **EPA has required Chevron to manage and collect all**  
10    **the mine runoff and conduct water treatment for a**  
11    **new treatment plan at the Questa Mine, right?**

12          A.     Yes, and I visited that plant.

13          **Q.     Okay. And Chevron is not required to**  
14    **clean up acid rock anywhere in the Red River Valley**  
15    **except in the mine site that it exclusively owned**  
16    **and operated for the past 50 to 80 years, correct?**

17          A.     Can you repeat that, please.

18          **Q.     Chevron's only required to clean up acid**  
19    **rock from its own mine?**

20          A.     Acid rock drainage or acid rock.

21          **Q.     Well, both, actually?**

22          A.     Within its own property, I believe so.

23          **Q.     It is not cleaning up any other parts of**  
24    **the Red River Valley?**

25          A.     Upstream and downstream of the mine.

1           **Q.       Well, that it didn't cause, I mean?**

2           A.       That it didn't cause.

3           **Q.       Correct.**

4           A.       I believe so.

5           **Q.       So you believe that they are cleaning up**  
6 **waste?**

7           A.       No, no.

8           **Q.       Thank you.**

9                   And with respect to the rock pile, Chevron  
10 **is also expected to properly manage the piles that**  
11 **it designed, created and left exposed to the**  
12 **elements for the past 50 years; is that right?**

13          A.       I believe so.

14          **Q.       It is not expected to address any**  
15 **nationally occurring rock formation?**

16          A.       Well, in actual fact, the active waste  
17 rock disposal on the front piles, the ones close to  
18 the R38, they actually covered and effectively  
19 sealed, I think, two or three hydrothermal  
20 alteration scars, so that was a positive effect of  
21 the dumps.

22          **Q.       The EPA is not requiring Chevron to clean**  
23 **up anything other than its own waste rock piles**  
24 **though, correct?**

25          A.       I don't believe so.

1           Q.       Thank you.

2                   And as for the tailings area, Chevron  
3       dumped more than 100 million tons of tailings waste  
4       from its mill at the Questa site into that area?

5           A.       I prefer the term deposited.

6           Q.       Okay. They deposited 100 million tons?

7           A.       Yes.

8           Q.       And Chevron disposed of billions of  
9       gallons of wastewater in the tailings impoundments  
10      that contaminated the aquifers beneath Chevron's  
11      tailing facility, isn't that right?

12          A.       I am not sure about that.

13                   MS. KIMBALL: Mr. Hambrick, could you pull  
14      up USX426, please.

15          Q.       (By Ms. Kimball) This is the EPA record  
16      of decision of Chevron's mining activities.

17                   Are you familiar with this document?

18          A.       I am familiar with it but really that was  
19      outside of the scope of work that I was asked to  
20      address.

21          Q.       Okay. Then I will move on.

22                   In terms of reclamation, covering mine  
23      tailings with clean soil and revegetating is a  
24      standard practice that the owner and operator would  
25      have been expected to perform even back in the

1     1970s, isn't that right?

2           A.     In due course, yes.

3           Q.     And Chevron agreed to do that at the  
4     Questa site when it got its permit to close out the  
5     mine from the State of New Mexico, isn't that right?

6           A.     I am not, again, I haven't run into that,  
7     no, that area.

8           Q.     Okay. But to summarize, Chevron has no  
9     responsibility for cleaning up any waste other than  
10    what it actually generated or caused, isn't that  
11    right?

12          A.     I believe so.

13          Q.     Let's turn now to your opinions on the  
14    DMEA or Defense Mineral Exploration Administration.

15          A.     Yes.

16          Q.     If I refer to that as the DMEA or DMEA,  
17    would you understand what that means?

18          A.     I prefer DMEA.

19          Q.     DMEA was a Federal agency that offered  
20    loans to private companies to explore for certain  
21    minerals if that exploration met DMEA's guidelines.

22                   Is that generally accurate?

23          A.     Yes.

24          Q.     And did the DMEA later became the Office  
25    of Mineral Exploration; is that right?

1           A.       That is right.

2           Q.       If I use the term DMEA today, will you  
3 understand that to mean either the DMEA or the  
4 Office of Mineral Exploration?

5           A.       Yes.

6           Q.       Chevron had no interactions with the DMEA  
7 prior to December 1956, isn't that right?

8           A.       Not that I am aware of.

9           Q.       Chevron submitted its initial application  
10 for a loan from DMEA on December 10, 1956; is that  
11 correct?

12          A.       Yes.

13               MS. KIMBALL: Mr. Hambrick, could you  
14 please pull up CX046, which was previously admitted.

15          Q.       (By Ms. Kimball) Is this the -- I'm  
16 sorry, is this Molycorp's original application for  
17 the DMEA loan?

18          A.       Yes, I am familiar with this document.

19               MS. KIMBALL: Mr. Hambrick, could you  
20 please go Page 2.

21          Q.       (By Ms. Kimball) Now, Chevron's  
22 application for a DMEA loan was purely voluntary,  
23 right?

24          A.       Yes.

25          Q.       They weren't required to apply for the

1     **loan?**

2           A.     No.

3           **Q.     And if they did not apply for a loan from**  
4     **DMEA, they would have had no interaction with DMEA**  
5     **at all, isn't that right?**

6           A.     I presume so.

7           **Q.     DMEA denied Chevron's initial application**  
8     **because the proposed exploration was too speculative**  
9     **based on the known geological data at the time,**  
10    **correct?**

11          A.     I have certainly read that, yes.

12                 MS. KIMBALL: And could you, Mr. Hambrick,  
13     could you please pull up CX048?

14                 THE COURT: Could you slow down just a  
15     little bit on your numbers.

16                 MS. KIMBALL: Sure, absolutely.

17                 THE COURT: All I got was 46.

18                 MS. KIMBALL: CX046. And this next one is  
19     CX048.

20           **Q.     (By Ms. Kimball) This exhibit also was**  
21    **previously admitted. This is DMEA December 21, 1956**  
22    **correspondence regarding the Chevron application,**  
23    **isn't that right?**

24          A.     Yes.

25           **Q.     And DMEA told Chevron that it may be**

1     **willing to loan Chevron money to fund exploration of**  
2     **the low grade molybdenum that the latest geological**  
3     **work had suggested was present, isn't that correct?**

4           A.     Where do I see that?

5           Q.     **So in this correspondence they were**  
6     **basically discussing the general -- their thoughts**  
7     **on how they would loan?**

8           A.     I thought you were putting something on  
9     the screen.

10          Q.     **No, I am just establishing what this**  
11     **document is for the moment.**

12                 MR. TODD:  Objection, Your Honor.  If  
13     counsel is going to ask the witness what a document  
14     says, could counsel show the witness the whole  
15     document.

16                 THE COURT:  I think that would only be  
17     fair.

18                 MR. TODD:  Thank you.

19          Q     **(By Ms. Kimball) You are welcome to look at**  
20     **the binder if you would like.  It is, again, CX048.**

21           A.     Okay.  Do you want to show me the page or  
22     tell me the page?

23          Q.     **Well, so I think right now your counsel**  
24     **had just asked that you be familiar with the**  
25     **document.**



1           A.       Okay.

2                   THE COURT:   You will find --

3           A.       Lots of correspondence, yes.

4           Q.       **(By Ms. Kimball) All right. So going**  
5 **back to Page 6.**

6           A.       Page 6, yes.

7           Q.       **In the second paragraph.**

8           A.       Yes.

9           Q.       **Here it says that DMEA may be willing to**  
10 **loan Chevron money to fund exploration for low grade**  
11 **molybdenum, is that accurate?**

12          A.       I don't see that in that paragraph.

13                   THE COURT:   I don't find that, counsel.

14          Q.       **(By Ms. Kimball) Sorry.**

15          A.       Which paragraph does it state that?

16          Q.       **In this paragraph, the second full**  
17 **paragraph, the first line it states that Chevron's**  
18 **initial idea was too tentative or was not supported**  
19 **by the geological data, isn't that accurate?**

20          A.       That is right, yes.

21          Q.       **DMEA ultimately told Chevron that it would**  
22 **loan it money to exploration of low grade**  
23 **molybdenum, isn't that accurate?**

24          A.       Where do I see that?

25          Q.       **Not in this document specifically, but in**

1     **general?**

2           A.     It was the case, yes.

3           **Q.     Chevron could have simply foregone the**  
4     **DMEA loan at that point and used alternate sources**  
5     **of funding, correct?**

6           A.     On the assumption it could raise  
7     alternative sources of funding.

8           **Q.     It could have entered into a joint venture**  
9     **with another company?**

10          A.     Possibly, yes.

11          **Q.     It could have gotten a bank loan?**

12          A.     Possibly.

13          **Q.     It could have sold stock?**

14          A.     Yes.

15          **Q.     Chevron instead voluntarily submitted a**  
16     **revised application in February 1957, isn't that**  
17     **right?**

18          A.     I believe so.

19                 MS. KIMBALL: Mr. Hambrick, could you  
20     please pull up USX140.

21          **Q.     (By Ms. Kimball) Dr. Rigby, are you**  
22     **familiar with this document?**

23          A.     Yes.

24          **Q.     Is this Chevron's second DMEA application?**

25          A.     I believe so.

1 MS. KIMBALL: Your Honor, I would like to  
2 move to admit USX140 as an exhibit.

3 THE COURT: Any objection?

4 MR. TODD: No objection, Your Honor.

5 THE COURT: Without objection, admitted.

6 (Exhibit admitted, USX140.)

7 Q (By The Court) And Chevron ultimately  
8 accepted a loan to conduct diamond drilling for low  
9 grade ore as well as some underground drifting and  
10 crosscutting in May 1957, right?

11 A. Yes.

12 Q. And Chevron conducted --

13 A. And sampling.

14 Q. Okay.

15 A. Important.

16 Q. Okay. And Chevron conducted exploration  
17 using the DMEA loan through June 1960, right?

18 A. Yes.

19 Q. And from that Chevron discovered three low  
20 grade, three blocks of low grade ore with their  
21 exploration under the contract; is that accurate?

22 A. One, two, and three, yes.

23 MS. KIMBALL: Mr. Hambrick, could you  
24 please pull up CX107, which was previously admitted.

25 Q. (By Ms. Kimball) Dr. Rigby, is this

1     **Chevron's final report to DMEA?**

2           A.     It appears to be, yes.

3           Q.     And at Page 9, are these the three blocks  
4     that we were just discussing?

5           A.     They are indeed.

6           Q.     And DMEA certified the discovery of the  
7     ore body in January of 1961, correct?

8           A.     Yes.

9           Q.     And even after Chevron completed  
10    exploration under the DMEA contract, it was not  
11    under any obligation to actually mine for ore that  
12    was discovered, isn't that right?

13          A.     In accordance with contractual  
14    obligations, no obligation whatsoever.

15          Q.     So if Chevron had decided at that point to  
16    not -- to get out of the mining business, they would  
17    not have owed anything back to DMEA, isn't that  
18    correct?

19          A.     No, no.

20          Q.     You have testified that DMEA provided  
21    Chevron with technical expertise, correct?

22          A.     Correct.

23          Q.     And Chevron had been mining for decades  
24    across multiple mines in North America before it  
25    ever applied for DMEA funding, isn't that right?

1           A.       Yes.

2           **Q.       And you testified that Chevron did not**  
3           **consider the possibility of mining low grade**  
4           **molybdenum at the Questa site prior to its**  
5           **interactions with DMEA, correct?**

6           A.       Well, I wasn't there, but there was no --  
7           in the initial application to DMEA, there was no  
8           reference to low grade. They were basically  
9           searching for more high grade, which sustained them  
10          for the previous 30 or 40 years.

11           THE COURT: Excuse me, counsel, would this  
12          be a good time to take an afternoon recess.

13           MS. KIMBALL: Sure.

14           THE COURT: Okay. We'll be in recess  
15          until 3:15.

16           (A recess was taken.)

17           THE COURT: You may be seated.

18           Before we begin, I forgot to ask for  
19          entries of appearance with everybody's name, and so  
20          I have got to do that or I will get in trouble. So  
21          could we have appearances, please, for the  
22          plaintiff.

23           MR. TODD: Gordon Todd for Chevron.

24           MR. HOPSON: Mark Hopson for Chevron.

25           MR. MUNDEL: Benjamin Mundel for Chevron.

1 MS. MUIRHEAD: Megan Muirhead.

2 MR. HUGHES: Scott Hughes counsel for  
3 Chevron.

4 MS. CRISHAM PELLEGRINI: And Ellen Crisham  
5 Pellegrini.

6 THE COURT: For the defense?

7 MR. HARRISON: Brian Harrison.

8 MR. HOSHIJIMA: Tsuki Hoshijima.

9 MR. AUGUSTINI: Michael Augustini.

10 MS. KIMBALL: Kimere Kimball.

11 THE COURT: Thank you.

12 Now you may proceed.

13 Q. (By Ms. Kimball) Dr. Rigby, just before  
14 we went on the break, you testified that you hadn't  
15 found any reference to any low grade molybdenum  
16 exploration in Chevron's original DMEA application,  
17 right?

18 A. Yes.

19 MS. KIMBALL: Mr. Hambrick, could you pull  
20 up CX046. And this is Chevron's original DMEA  
21 application, correct, CX046.

22 Mr. Hambrick, if you could turn to Page 8,  
23 please.

24 Q. (By Ms. Kimball) And in the last full  
25 paragraph. I will wait until Dr. Rigby is there.

1           A.       Page 8?

2           Q.       Yes.

3                    Sorry, to be clear the Page 8, that is the  
4   page number at the very bottom in small print. It  
5   is the PDF page number. So it says Page 8 of 51 at  
6   the very bottom.

7                    Does that help?

8           A.       Yes.

9           Q.       All right. So do you see the paragraph  
10   that says, "By the time of the second Carpenter  
11   report, work had progressed westward in the granite  
12   on the main drift west and some exploration of the  
13   contact to the south of the main drift had been  
14   done."

15                   And then skip down a couple of lines. "At  
16   this time the possibility of finding a large low  
17   grade -- large low grade bodies of ore seemed  
18   possible. Then the sampling of all molybdenum from  
19   these headings was started."

20                   Is that an accurate reading of that  
21   statement?

22           A.       It may be an accurate reading but I don't  
23   believe it is an accurate interpretation because the  
24   application from Molycorp, the initial application,  
25   was solely drifting and crosscutting, no sampling,

1 no diamond drilling to address the third dimension.  
2 So that is not what they were looking for, but, of  
3 course, there is always the possibility that some  
4 large amounts of low grade may be there but that  
5 certainly wasn't the focus of what they were  
6 proposing.

7 Q. So this is their original application,  
8 correct?

9 A. Yes.

10 Q. It does reference the possibility of  
11 finding low grade molybdenum?

12 A. It does, but it doesn't state that that  
13 was the target.

14 Q. Sure.

15 And then if you turn back to Page 40 of  
16 this document. So Chevron had attached the  
17 Carpenter report to their application?

18 A. Both Carpenter reports were attached.

19 Q. Correct. So the second one begins at  
20 approximately Page 36 of this document of CX048?

21 A. Are you going to put it up on the screen?

22 Q. Sure.

23 A. Or should I refer?

24 MS. KIMBALL: Mr. Hambrick, could you pull  
25 up Page 36? Maybe try 35.



1           Q.        **(By Ms. Kimball) Sir, can you see that**  
2       **this is the Carpenter report --**

3           A.        Yes.

4           Q.        **-- that was attached to the application**  
5       **for DMEA in their first application, correct?**

6           A.        I believe that sort of background  
7       geological research interpretation potential, yes,  
8       yeah.

9           Q.        **So Chevron had hired Mr. Carpenter to**  
10       **conduct a geological study, correct?**

11          A.        Yes.

12          Q.        **And Mr. Carpenter had recommended that**  
13       **they search for low grade molybdenum?**

14          A.        No, I don't believe so. I think he was  
15       still recommending the possibility of high grade  
16       veins and he was certainly recommending developing,  
17       potentially drilling to find the contact where they  
18       thought the contact could well be a favorable host  
19       for high grade veins.

20          Q.        **So if you turn to Page 40, Mr. Carpenter**  
21       **notes the possibility of finding low grade ore,**  
22       **correct?**

23          A.        Can you show me where that is stated.

24          Q.        **Sure.**

25                    **In the paragraph that begins, "The western**

1     **most penetration of the exploration."**

2                   **And about halfway through the paragraph it**  
3     **says, "There is a possibility that the contact**  
4     **fringe may represent a zone of shattering and**  
5     **fracturing sufficiently extensive to allow for the**  
6     **development of low grade molybdenum ore body."**

7                   **Correct?**

8           A.     That is a possibility, yes, as he states.

9           **Q.     So Chevron was aware of the possibility of**  
10    **finding low grade molybdenum before they applied for**  
11    **the DMEA application, right?**

12          A.     I would have thought so, yes.

13          **Q.     You also testified that part of the**  
14    **expertise that DMEA provided Chevron was with the**  
15    **information on diamond drilling and drilling**  
16    **procedures to look for low grade ore, correct?**

17          A.     I think it is a bit more than that because  
18    my own personal opinion is that the technical  
19    expertise which the DMEA provided free of charge,  
20    probably more important than the money itself,  
21    because they were very good, very good exploration  
22    geologists and mining engineers from the USGS and  
23    the Bureau of Mines.

24                   And I think really what -- from the outset  
25    they were believed strongly in the possibility of

1 large low grade deposits of molybdenum. And what  
2 they were proposing was effectively to explore in  
3 the third dimension. That is why they brought in  
4 the concept of diamond drilling and sampling and  
5 assaying.

6 Because what Molycorp was proposing was  
7 just simply two dimensional exploration, the X and  
8 the Y, with horizontal drifts and horizontal  
9 crosscuts. What the DMEA was insistent on was look  
10 into the third dimension by vertically up,  
11 vertically down and incline drill holes to look at  
12 the distribution of mineralization in a volumetric  
13 sense. That is the difference.

14 **Q. So am I correct in understanding that they**  
15 **would do that through diamond drilling and long hole**  
16 **drilling, correct?**

17 A. Diamond drilling, sampling and assaying.

18 **Q. And you testified previously that Chevron**  
19 **had done no exploratory drilling, correct?**

20 A. Yes.

21 **Q. But diamond drilling and long hole**  
22 **drilling were by no means new or novel methods of**  
23 **exploration in the mining industry in the 1950s,**  
24 **were they?**

25 A. No, not at all.

1           **Q.       And Chevron had conducted its own diamond**  
2       **drilling specifically at the Questa site in 1954,**  
3       **hadn't it?**

4           A.       Not that I am aware of.

5                   MS. KIMBALL: Mr. Hambrick, could you  
6       please pull up USX0003, which was previously  
7       admitted.

8           **Q.       (By Ms. Kimball) Dr. Rigby, this is**  
9       **Chevron's October 1964 SEC disclosure, correct?**

10          A.       Yes, yes.

11                  MS. KIMBALL: And, Mr. Hambrick, if you  
12       could go to Page 17, the second paragraph under  
13       Exploration and Development.

14          **Q.       (By Ms. Kimball) Here Chevron disclosed**  
15       **that, "In 1954 the company initiated a small scale**  
16       **exploration program consisting of diamond drilling,**  
17       **of drifting and crosscutting to determine the**  
18       **possibility of developing large mineable tonnages of**  
19       **low grade material."**

20                   **Right?**

21          A.       I see that is what it says. I have given  
22       this some considerable thought. I believe that is  
23       wrong. I believe that is a misstatement and it was  
24       not offered by the appropriate technical person from  
25       Molycorp.

1           The document is basically a legal document  
2   to satisfy the SEC requirements. And I think what  
3   basically is done there, they, this was in 1961, so  
4   I think they -- he or she has inadvertently  
5   compressed what actually happened and there is  
6   absolutely no evidence in the record other than this  
7   statement that any diamond drilling was undertaken  
8   by Molycorp prior to that associated with the DMEA  
9   contract.

10       **Q.     And as an SEC filing, Chevron was required**  
11 **to submit truthful information in that filing,**  
12 **correct?**

13       A.     Agreed, but I don't really see that as  
14 being misrepresentative. I think it was just a, you  
15 know, lack of knowledge.

16       **Q.     And you were present in the courtroom for**  
17 **Mr. Dewey's testimony, correct?**

18       A.     Yes.

19       **Q.     And when Mr. Dewey was shown this same**  
20 **paragraph did you hear him say that that did conform**  
21 **to his understanding of the exploration in the '50s?**

22           MR. TODD: Objection, Your Honor,  
23 misstates the testimony. I think Mr. Dewey was  
24 shown a document from 1957 not 1964, which did not  
25 contain the same statement regarding diamond

1 drilling in 1954.

2 THE COURT: Well, the record will speak  
3 for itself.

4 MR. TODD: Thank you, Your Honor.

5 Q (By Ms. Kimball) Chevron had also conducted  
6 diamond drilling at its other mines prior to the  
7 DMEA application, correct?

8 A. I have no knowledge of that.

9 MS. KIMBALL: Mr. Hambrick, if we could go  
10 to Page 22 of USX003. And go to the second  
11 paragraph under the section on the Mountain Pass  
12 mine.

13 Q. (By Ms. Kimball) Do you see here where it  
14 refers to drilling being done at the Mountain Pass  
15 mine?

16 A. I do, and now I have that knowledge.

17 Q. And they also had conducted diamond  
18 drilling at the Oka mine in Québec, correct?

19 A. Quite possibly.

20 MS. KIMBALL: Mr. Hambrick, if you could  
21 go to Page 23 of the same document, the second  
22 paragraph under the Oka Mine heading.

23 Q. (By Ms. Kimball) Do you see here where it  
24 refers to exploratory drilling done at the Oka Mine?

25 A. Absolutely, yes.

1           Q.       So Chevron was well aware of the diamond  
2       drilling methodology at the time it submitted the  
3       DMEA application, isn't that right?

4           A.       I would have certainly thought so.

5           Q.       You also opine that without the loan  
6       Chevron obtained from DMEA it could not have  
7       discovered the low grade molybdenum at the Questa  
8       Mine; is that right?

9           A.       I think without the loan, and let's just  
10      call it the discipline that the DMEA brought to the  
11      exploration program, I don't believe that they would  
12      have discovered it.

13          Q.       And lots of mining company explored for  
14      ore without seeking any funding from DMEA, correct?

15          A.       The majority of them do.

16          Q.       If a private mining company declines to  
17      seek any loan from DMEA, then they don't have any  
18      interaction with DMEA, correct?

19          A.       No.

20          Q.       Chevron raised funding for exploration  
21      without DMEA before it ever submitted its  
22      application, correct?

23          A.       I am not sure about that. They certainly  
24      raised funding. Whether that was specifically for  
25      exploration, I cannot say.

1           Q.     Well, they conducted exploration at the  
2     mine prior to submitting the DMEA application,  
3     correct?

4           A.     Do you want to be specific in terms of  
5     timeline?

6           Q.     At any time.

7           A.     Well, fundamental of a mining project you  
8     are constantly replacing depleted reserves, yes.

9           Q.     They had done that without any DMEA loans,  
10    correct?

11          A.     Yes.

12          Q.     Chevron had raised money for exploration  
13    at its Oka site by entering into a venture with  
14    Kennecott in 1955, correct?

15          A.     Yes.

16          Q.     And Chevron could have sought a similar  
17    arrangement with another mining or even with  
18    Kennecott at the Questa Mine, correct?

19          A.     It could, yes.

20          Q.     Chevron had also raised money for  
21    exploration and mining through loans with private  
22    banks, correct?

23          A.     Mining through -- sorry.

24          Q.     Chevron had also raised money for its  
25    mining through loans from private banks, correct?



1           A.       Yes, yes.

2           **Q.       And they could have done that again in, in**  
3           **the '50s as well, correct?**

4           A.       In the '50s, well, again, provided they  
5           are able to demonstrate to whoever is going to  
6           provide the loans that there is a good likelihood of  
7           successful exploration and being paid back the loan.

8           **Q.       In June of 1954, just two years before**  
9           **applying for the DMEA loan, Chevron borrowed**  
10          **\$750,000 from Chase bank, correct?**

11          A.       I believe so.

12          **Q.       And at the same time borrowed another**  
13          **750,000 from Manufacturers Trust Company?**

14          A.       Yes.

15          **Q.       So they were able to raise \$1.5 million**  
16          **even before they ever -- even before they submitted**  
17          **the DMEA application, correct?**

18          A.       I believe there were actually additional  
19          raisings as well. But nowhere does it state that  
20          that is solely for exploration at Questa. Certainly  
21          in the -- what is it, in 1957 raising where I  
22          remember going back and looking at the balance  
23          sheets for '52, '53, '54, '55, '56, and at the  
24          bottom of each summary, if you like, was net revenue  
25          including special factors. And the maximum I saw

1     there was a million dollars and that is for the  
2     whole of Molycorp, you know, with its multiple  
3     mineral interests. So I don't see there is any way  
4     that we can really establish that with additional  
5     fundraising just how much of that would have been  
6     available for exploration of Questa.

7           **Q.     The amount of money that Chevron received**  
8     **under DMEA was only \$200,000, wasn't it?**

9           A.     Yes, yeah.

10          **Q.     And they were able to raise 1.5 million**  
11     **from bank loans in 1954, correct?**

12          A.     Yes, I believe so.

13          **Q.     And they also were able to raise**  
14     **2.8 million by selling stock to Kennecott in 1955,**  
15     **correct?**

16          A.     Yes.

17          **Q.     So they were able to raise 4 million**  
18     **before they had even filed their DMEA application,**  
19     **whereas DMEA only gave them \$200,000, correct?**

20          A.     Yes. But I think 1955 the net revenue,  
21     including special factors, is about \$500,000 for the  
22     corporation. So, you know, I don't really see how I  
23     can comment that the ability to raise would result  
24     in substantial exploration funding at Questa.

25          **Q.     And Chevron raised another 4 million of**

1     **their own private capacity solely for exploration by**  
2     **issuing stock in 1957, correct?**

3           A.     1957 and the prospectus actually appended  
4     a statement or even appended the signed DMEA  
5     contract.

6           **Q.     Sure.**

7           A.     That was good timing.

8           **Q.     They had raised the same amount of money**  
9     **after submitting the application as before, correct?**

10          A.     Yes.

11          **Q.     And they had raised that money before DMEA**  
12     **had ever certified any ore discovery, correct?**

13          A.     Yes, on the basis of the existence of a  
14     DMEA contract, which was a big positive.

15          **Q.     On the basis of a contract for \$200,000?**

16          A.     Yes.

17                 MS. KIMBALL: And just for housekeeping,  
18     Mr. Hambrick, could you please pull up CX166.

19          **Q.     (By Ms. Kimball) Dr. Rigby, this is**  
20     **confirmation of DMEA's receipt of Chevron's**  
21     **repayment of the DMEA loan, correct?**

22          A.     Yes.

23                 MS. KIMBALL: Your Honor, I would like to  
24     admit CX166 into evidence.

25                 MR. TODD: No objection.

1 THE COURT: No objection, admitted.

2 (Exhibit admitted, CX166.)

3 Q (By Ms. Kimball) And this document  
4 demonstrates that DMEA loaned Chevron \$200,000,  
5 \$200,339.57 cents, correct?

6 A. In 1966, yes.

7 Q. But they repaid it in 1966, correct?

8 A. Yes.

9 Q. They had loaned it in 1957?

10 A. Correct.

11 Q. So Chevron -- isn't it true that the DMEA  
12 loan was for up to \$255,000?

13 A. That was the DMEA share, if you like,  
14 50 percent of the projected cost or the actual cost.

15 Q. But then Chevron only used \$200,000 of the  
16 reimbursable cost, correct?

17 A. Yeah, that was half of the cost.

18 Q. No, they used \$200,000 of the 255 half?

19 A. That is right, yeah. It was based on the  
20 amount of exploration actually undertaken.

21 Q. So Chevron did not use 20 percent of the  
22 available funding from DMEA, correct?

23 A. It appears that way, yes.

24 Q. And Chevron did conduct its own  
25 exploration with non-DMEA funding at the same time

1 as the DMEA funding, correct?

2 A. Correct.

3 Q. And you testified at your deposition that  
4 Molycorp was doing a significant amount of  
5 exploratory work on its own during the DMEA  
6 contract, correct?

7 A. Correct.

8 Q. Chevron's final DMEA report spells out  
9 some of the work that Chevron did with private funds  
10 at the same time as the DMEA, isn't that right?

11 A. Yes.

12 MS. KIMBALL: If we pull up CX107.  
13 Mr. Hambrick, if you could go to Page 7, please.

14 Q. (By Ms. Kimball) And in this section that  
15 refers to unassisted work.

16 Do you see that?

17 A. I do.

18 Q. That is the work that Chevron did, at  
19 least some of the work that Chevron did with its own  
20 private capital during the time of the DMEA loan,  
21 correct?

22 A. It is.

23 Q. And Chevron stated in its SEC disclosures  
24 that it spent 1.19 million of its own private  
25 capital for exploration at the same time as it was

1     **using the \$200,000 from DMEA, correct?**

2           A.     I don't recall seeing that, but I didn't  
3     dispute it.

4           **Q.     Okay.**

5                   MS. KIMBALL: Mr. Hambrick, if you could  
6     pull up USX003 and go to Page 17.

7           **Q.     (By Ms. Kimball) And under Exploration**  
8     **and Development, the last full paragraph that**  
9     **begins, "In 1954," the second line of that paragraph**  
10    **says, "In the years from 1957 to 1960 this effort**  
11    **was financed by expenditures of the company**  
12    **aggregating 1.19 million and to the extent of**  
13    **\$200,000 by the Defense Minerals Exploration**  
14    **Administration"?**

15          A.     So, that 1.19 is in addition to the  
16    \$200,000.

17          **Q.     Yes, that is how I read it.**

18          A.     It is reasonable to say of 19.19, 200,000  
19    was applied to the contract was work applied to the  
20    contract and the balance was for Molycorp's account?

21          **Q.     Molycorp's own -- the balance was for**  
22    **Molycorp's --**

23          A.     Own exploration.

24          **Q.     -- exploration under its own private**  
25    **capital?**

1           A.       All I can say there it must have been very  
2     frustrating for Molycorp that that expenditure  
3     didn't result in anything positive.

4           **Q.       So it is your testimony that the**  
5     **1.2 million that they spent on their own had no net**  
6     **benefit?**

7           A.       No, I think we established that 200,000 of  
8     that was on the contract.

9           **Q.       Right.**

10          A.       And 900-and-something wasn't. And I am  
11     not aware that they -- that they were successful and  
12     found anything of substance.

13          **Q.       So you testified that DMEA certification**  
14     **of the ore body allowed Chevron to borrow additional**  
15     **funding, correct?**

16          A.       Yes.

17          **Q.       But DMEA certified Chevron's ore discovery**  
18     **in 1961, correct?**

19          A.       Yes.

20          **Q.       And Chevron raised \$8 million of private**  
21     **capital with no DMEA certification just between 1954**  
22     **and 1957, right?**

23          A.       I think we already covered the 1957  
24     whereby they appended their signed contract to that  
25     fundraising so that was, you know, from a market

1 perspective that was deemed to be a positive.

2 Q. The \$4 million?

3 A. Yeah.

4 Q. In 1957?

5 A. Yeah.

6 Q. They raised 4 million before that without  
7 the application?

8 A. Yes.

9 Q. We just covered that Chevron raised  
10 \$1.5 million from private banks in 1954 and  
11 2.8 million from Kennecott in '55?

12 A. Agreed, yes.

13 Q. And Chevron had been mining for decades  
14 before it ever received any DMEA certification,  
15 correct?

16 A. Three-and-a-half decades, I think.

17 Q. The certification of discovery did not  
18 require Chevron to do anything, correct?

19 A. Other than what they have done in  
20 accordance with the contract.

21 Q. Well, the certification didn't require  
22 them to do anything, did it?

23 THE COURT: Counsel, you have already  
24 asked him that question at least twice.

25 MS. KIMBALL: I'm sorry, Your Honor.



1 THE COURT: They didn't have to do  
2 anything if they didn't want to.

3 MS. KIMBALL: Okay. Thank you,  
4 Your Honor.

5 A. Other than submit a final report.

6 Q. (By Ms. Kimball) And the certification of  
7 discovery did not guarantee that it would be  
8 feasible to mine any of the ore blocks, correct?

9 A. Correct.

10 Q. The certification did not give any  
11 consideration to potential mining or milling costs?

12 A. No, premature.

13 Q. Or any ore grade cutoff?

14 A. Premature.

15 Q. Any waste or ratios?

16 A. Premature.

17 Q. Or any market prices?

18 A. The same comment.

19 Q. The certification also did not dictate  
20 what method of mining might be used if Chevron  
21 decided to continue exploring and develop a mine,  
22 correct?

23 A. It didn't explicitly state it but it was  
24 obvious for anyone who looked at the tonnage grade  
25 and basically depth of where that mineralization had

1     been discovered, that the only way of mining that  
2     was by an open pit.

3           **Q.     Now, did the exploration under the DMEA**  
4     **loan was at the 7800 level, correct?**

5           A.     Yes.

6           **Q.     And the open pit was from the surface down**  
7     **to about 8400, correct?**

8           A.     Yes.

9           **Q.     So the open pit never got down to the area**  
10    **that was explored under DMEA, correct?**

11          A.     Not quiet, but what needs to be  
12    appreciated is that the up-holes from Drift Number 3  
13    East and the downholes from Drift Number 4 West  
14    intersected the mineralization which subsequent  
15    drilling confirmed was continuous all the way  
16    through to surface. So it is the same orbity.

17          **Q.     So after the DMEA loan or after the DMEA**  
18    **exploration was completed and Chevron conducted**  
19    **additional exploration on its own, it was able to**  
20    **open an open pit mine, correct?**

21          A.     It was, but it wouldn't have been able to  
22    without the most fundamentally important of any new  
23    Greenfield, well -- Brownfill Mining project which  
24    is the discovery of mineralization from exploration  
25    and that is what the DMEA program resulted in.

1           **Q.       And that was --**

2           A.       The most important time in a mine's life.

3           **Q.       And that was the discovery of ore bodies**  
4           **down at the 7800 level, correct?**

5           A.       Which subsequently were approved to be  
6           continuous through to surface.

7           **Q.       So the historical documents consistently**  
8           **describe the open pit mine as the result of**  
9           **exploration Chevron undertook after the DMEA loan,**  
10          **correct?**

11          A.       As I said the DMEA exploration resulted in  
12          the discovery of what was a large volume of low  
13          grade material. That was just a start of the work  
14          that was needed to be done to prove that up prior to  
15          making a development decision.

16                 MS. KIMBALL: Mr. Hambrick, could you  
17          please pull up CX118 which was previously admitted.  
18          And I think if you go to Page 3 it gives the title  
19          page of the document.

20          **Q.       (By Ms. Kimball) Dr. Rigby, this is a**  
21          **report of Questa Mine by the -- I think if you go to**  
22          **Page 9 it also provides some additional information,**  
23          **but this is a report of Questa Mine by Bear Creek**  
24          **Mining Company which was a subsidiary of Kennecott,**  
25          **correct?**

1           A.       I believe so, yes.

2                   MS. KIMBALL: Mr. Hambrick, could you  
3 please turn to Pages 67 and 68.

4                   And if we could see the bottom of 67 where  
5 it starts.

6           A.       57?

7           **Q.       (By Ms. Kimball) This is PDF 67. It**  
8 **follows the Bates numbering at the very bottom of**  
9 **the page.**

10                  MS. KIMBALL: So, Mr. Hambrick, if you  
11 could pull up side by side the bottom paragraph of  
12 Page 68 beginning with Subpart B.

13           **Q.       (By Ms. Kimball) Okay. Dr. Rigby, do you**  
14 **see here it is describing the Sulphur Gulch**  
15 **mineralized zone?**

16           A.       Yes.

17           **Q.       And the Sulphur Gulch mineralized zone is**  
18 **where the open pit was ultimately placed, correct?**

19           A.       Yes.

20           **Q.       And then if you go to the top of Page 68.**

21                   Do you see here where it says, "Molybdenum  
22 is visible at the surface in some places"?

23           A.       Yes.

24           **Q.       Later on it says, "The eastern edge of the**  
25 **ore has been penetrated by numerous and extensive**

1     **addits."**

2                   **And then the last sentence of the**  
3     **paragraph -- I'm sorry the next sentence says,**  
4     **"These workings were driven in search of high grade**  
5     **veins but little production is reported from them.**  
6     **No drilling has been done here by Molycorp during**  
7     **their low grade exploration program."**

8           A.     Yes, I wouldn't have expected that because  
9     the drilling was confined to the agreed underground  
10    in accordance with the DMEA contract.

11          **Q.     And the exploration that had been done in**  
12    **the area of the open pit was all for high grade,**  
13    **correct?**

14          A.     I am -- well, no production came from the  
15    open -- well, there wasn't an open pit, so no  
16    production from surface was forthcoming and no  
17    drilling was done at the time until post-1961.

18          **Q.     So, I'm sorry, in this paragraph it says**  
19    **that there were numerous and extensive addits that**  
20    **had been driven in search of high grade veins,**  
21    **correct?**

22          A.     Yeah, but I don't know when that was  
23    actually done.

24          **Q.     Okay. But it was not done under the DMEA**  
25    **loan, correct?**

1           A.       No.

2           **Q.       So the area of the open pit had been**  
3           **explored but not under the DMEA loan, correct?**

4           A.       I think it had been partially explored but  
5           with some stage in the past. But without the  
6           benefit of the results of the DMEA exploration  
7           program successfully delineating the three ore  
8           blocks, so low grade ore blocks.

9           **Q.       So there had been exploration for high**  
10          **grade ore at the surface for mineralization was**  
11          **visible on the surface?**

12          A.       Yes. I presume those were the addits that  
13          were referenced.

14          **Q.       And do you see in the last sentence of**  
15          **this section it says, "This area is of particular**  
16          **interest as a potential open pit deposit."**

17          A.       Yes, yes absolutely right.

18          **Q.       And that is ultimately what Chevron did,**  
19          **correct, they put the open pit in Sulphur Gulch?**

20          A.       Yes.

21          **Q.       On the area of mineralization that was up**  
22          **at the surface?**

23          A.       That was first identified from the DMEA  
24          contract underground.

25          **Q.       So you previously testified that there was**

1     no drilling done under DMEA in the area that became  
2     the open pit, correct?

3           A.     Not in accordance with the contract that I  
4     am aware of.

5           Q.     That there was no drilling -- sorry, that  
6     was a bad question with too many negatives.

7                     It was your previous testimony that there  
8     was no drilling in the area of the open pit under  
9     the DMEA contract, correct?

10          A.     Correct.

11          Q.     Okay. And you further testified that all  
12     of the exploration in that area began in 1962,  
13     correct?

14          A.     Subsequent to the discovery of the three  
15     ore blocks and the emphasis shifting to surface  
16     drilling, yes.

17          Q.     And the models that you discussed in your  
18     direct testimony you further confirm that there was  
19     no drilling under the DMEA contract that occurred in  
20     the area that became the open pit, correct?

21          A.     Certainly not that I am aware of.

22                     MS. KIMBALL: Let's look at USX380 which  
23     was previously admitted.

24          Q.     (By Ms. Kimball) Dr. Rigby, this is an  
25     image that you prepared for your expert report,

1       **correct?**

2           A.       One of many.

3           **Q.       And this is a side view into the mountain,**  
4       **correct?**

5           A.       Well, it is interesting because can I just  
6       give a clarification here? This is a view looking  
7       northwest, which means it is basically a projection.  
8       It is an isometric view and it wasn't intended to  
9       show the geometrical relativity between the open  
10      pit, the underground, the drill holes and so on.  
11      That wasn't its subjective because it says it was a  
12      view through the open pit location, not the open pit  
13      because the open pit didn't exist at that time. But  
14      you have to, whatever features you want to show, you  
15      have to project them onto a particular plane.

16          **Q.       Sure.**

17          A.       Then you look at an oblique view and it  
18      distorts the relative position. So I think for the  
19      purposes that you want to use this diagram for, it  
20      is misleading. What I was going to suggest if you,  
21      if you would allow me is just to do two very simple  
22      sketches on the white board, which I think will  
23      clarify what I am trying to say.

24          **Q.       We will go through all of the images in**  
25      **your report. So in this image am I correctly**



1     understanding that the DMEA exploration occurred in  
2     what would have been southeast of the location that  
3     became the open pit?

4           A.     South -- wait a minute.

5           Q.     Did I get my directions wrong?

6           A.     Southwest.

7           Q.     Okay. Because we are looking northeast  
8     you said?

9           A.     Northwest we are looking. That is why I  
10    wanted to show you the orbity, then you would know  
11    straight away.

12          Q.     We will get to that. So the DMEA drilling  
13    is at a location that is south and west of the open  
14    pit, correct?

15          A.     Yes, that is fair.

16          Q.     Okay.

17                 THE COURT: But there is no open pit  
18    there, right?

19                 MS. KIMBALL: Sorry?

20                 THE COURT: There is no open pit.

21          Q     (By Ms. Kimball) There was no open pit at  
22    the time, of the area that became the open pit?

23          A.     Yes.

24          Q.     Am I correctly understanding here that the  
25    neon green lines are the diamond drill lines?

1           A.       They are.

2           **Q.       That were done under DMEA?**

3           A.       Correct.

4           **Q.       Am I correct in understanding that all of**  
5           **the drilling under the DMEA was done at an elevation**  
6           **hundreds of feet below what is depicted on here as**  
7           **the open pit?**

8           A.       Well, that it just says the open pit  
9           location. There isn't an open pit there, that is  
10          why I am saying this is misleading because you go to  
11          bring the third dimension in to see just how big the  
12          open pit was and the relationship between the open  
13          pit and the low grade mineralization, which was  
14          discovered under the DMEA contract. The two are  
15          very closely related.

16          **Q.       But the DMEA contract drilling occurred**  
17          **several hundred feet below the lowest elevation of**  
18          **the open pit, right?**

19          A.       There were vertically drilled up-holes in  
20          continuity of mineralization.

21          **Q.       But the up-holes were maximum of 500 feet,**  
22          **correct?**

23          A.       Yes. Still intersected the  
24          mineralization.

25          **Q.       Which was still lower than the bottom of**

1     **the open pit?**

2           A.     The open pit ultimately, I can't show, can  
3     I draw? The thing you have to bear in mind is this  
4     enormous amount of waste rock which basically limits  
5     the distance down the ore body that an economic open  
6     pit could extract. And that is why the exploration  
7     was deeper, I agree, but it was directly below what  
8     ultimately became the open pit side walls.

9           **Q.     Okay.**

10           MR. TODD: Your Honor, for the record  
11     could we preserve this as a demonstrative?

12           THE COURT: I'm sorry?

13           MR. TODD: For the record, Your Honor,  
14     could we preserve the marked up chart as a  
15     demonstrative exhibit?

16           THE COURT: How do we do that?

17           (Discussion off the record.)

18           A.     I still don't like this view. There are  
19     much better views that we could use.

20           **Q.     (By Ms. Kimball) Let's look at CX420**  
21     **which is another image from your expert report. So**  
22     **this is also an image from your expert report,**  
23     **correct?**

24           A.     This is.

25           **Q.     This exhibit has also previously been**

1     **admitted.**

2           A.     It is.

3           **Q.     And there is no place in looking at this**  
4     **image where the drillings intersect the area that**  
5     **became the open pit either, correct?**

6           A.     I believe that is where I should have  
7     added another note to this diagram. Because the  
8     green outline is the base of the open pit, okay? It  
9     is the bottom of the open pit.

10           THE COURT: Which green outline?

11           A.     That one, that is the bottom of the open  
12     pit. The open pit is several hundred feet deep and  
13     it has slopes ranging from 28 degrees in the  
14     riolites, 38 degrees in the undersites and  
15     45 degrees in the granite, which should make this  
16     sort of open pit perimeter somewhere like that  
17     (indicating).

18           **Q     (By Ms. Kimball) Several hundred to several**  
19     **thousand feet above those lines, correct?**

20           A.     These are -- if you look at an overall  
21     slope handle it may be 28, 38, 45, maybe 35 degrees.  
22     You know, it is not steep, it is flat. So over a  
23     depth of an open pit, several hundred feet thick,  
24     you could well be 2,000 feet further horizontally to  
25     the south.

1           **Q.       Because you have removed a bunch of**  
2           **overburden, correct?**

3           A.       Yes, but the pit slopes are sort of like  
4           that (indicating). They are not 45 degrees, they  
5           are more like 33, 35.

6           **Q.       Okay.**

7                   MS. KIMBALL: Let's go to USX379.

8           **Q.       (By Ms. Kimball) Now, this is an image**  
9           **from your expert report that then has grid lines**  
10          **superimposed on top of it, correct? This exhibit**  
11          **has also been previously admitted?**

12          A.       Yes.

13          **Q.       This is an image from your expert report?**

14          A.       It is indeed, yes.

15          **Q.       Thank you.**

16                   And the arrows and dots show the drills  
17          under DMEA that are closest to the open pit,  
18          correct?

19          A.       Correct.

20          **Q.       And they are still to the west of the open**  
21          **pit, correct?**

22          A.       But again the same point as the last  
23          diagram. This is the base of the open pit. And so,  
24          you know, I mean, to do what I did previously you  
25          might be having something, you know, like that

1 (indicating).

2 Q. But none of those drill lines ever  
3 intersected the open pit, correct?

4 A. They intersected the mineralization that  
5 was exploited by the open pit, yes.

6 Q. They never intersected the area that was  
7 actually excavated by the open pit, correct?

8 A. They, actually they did. They didn't  
9 intersect the material that was mined in the open  
10 pit, but the ore that they intersected immediately  
11 above was part of the stripping to access the ore in  
12 the open pit. So it is within the open pit  
13 perimeter.

14 Q. It is within the open pit perimeter, but  
15 several hundred feet below it?

16 A. Correct.

17 Q. Okay. Several hundred to several  
18 thousand?

19 A. I would say several hundred rather than  
20 several thousand.

21 Q. But the perimeter is going from the  
22 overburden that is --

23 A. It depends whether you are talking down  
24 dip, vertical or what. Let's not complicate things.

25 MS. KIMBALL: Your Honor, this would

1 actually be a decent time to stop.

2 THE COURT: Okay. We will be in recess  
3 until 9:00 tomorrow morning.

4 (Proceedings concluded at 3:57 p.m.)

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2

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